IRON AGE

Semi-Annual Index

January - June, 1970

Volume 205

Microfilm Copies

Complete microfilm copies of The IRON AGE, text and advertising, are available beginning with Vol. 161 (1948) through the issues covered in this index. For information write to University Microfilms, 313 N. First St., Ann Arbor, Mich.

IRON AGE Index

Volume 205 • January - June, 1970

XUM

SEMI-ANNUAL INDEX IRON AGE

January - June 1970 Volume 205

A

Abex Corp.:
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71
Why Computers Fail . . . Or Succeed, by J. E. Sandford, Apr 30 p 63

Abrasives
Abrasive Saw System Cuts and Carries, May 7 p 78
Adaptive Control Lowers Cutting Cost, by T. H. Malim, June 25 p 63
Diamonds Dig into Stainless, Mar 5 p 66

Adhesives
Adhesive Bonding Bonanza Beckons, by B. D. Wakefield, May 7 p 84

Administrative Management Assn.:
Help! We're Doing Four Days Work in Five, Feb 5 p 27

Aerodex, Inc.:
Alloy Temperature Limits Boosted by Coating Process, Feb 26 p 73

Aerojet-General Corp.:
Maxi-Use for Mini-Computers, by T. H. Malim, Mar 12 p 101
Ships Skim Over Water on Bubbles, Jan 22 p 66

Aeronca, Inc.:
Profits Lure Industry Overseas . . ., by K. W. Bennett, May 28 p 88

Aerospace
Adhesive Bonding Bonanza Beckons, by B. D. Wakefield, May 7 p 84
Aerospace Gets Set for a Shot-in-the-Arm, May 28 p 26
Forget the Cycle—Full Speed Ahead, by G. J. McManus, June 11 p 93
Lunar Wheels Look for Earth Jobs, Apr 16 p 26
Refractories Start Where Metals End, Feb 5 p 62
Space is for Exploring, by G. J. McManus, Mar 19 p 49
U. S. Heads for the Mineral Poorhouse, by B. D. Wakefield, June 4 p 71
What's Happening to Fuel Cells? by A. M. Greene, Mar 19 p 57

Aerospace Industry
Aerospace Faces a Tough Decade, by N. B. Schwartz and R. R. Irving, June 11 p 99
Forget the Cycle—Full Speed Ahead, by G. J. McManus, June 11 p 93

Air Force Machinability Data Center
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71

Air Reduction Co.:
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

Aircraft
General Aircraft: Up, Up and Oy Vey! by B. D. Wakefield, Apr 2 p 63

Ajax Magnathermic
GM's New Cupola Blows Continuous Melting Process, by R. A. Wilson, Apr 16 p 49

Alan Wood Steel Co.:
Galvanized: More Price Backtracking, by K. W. Bennett, June 4 p 58
Mystery Shrouds Steel Share Grab, by C. J. Suchocki, June 25 p 41
Strikes, Market Muddle Prices Into Trouble, by G. J. McManus, May 28 p 86

Alcan Aluminum Ltd.:
Aluminum for International Markets Up 0.5¢, by James Beizer, Apr 23 p 149

Alcoholism
Don't Give Up on Alcoholic Employee, Mar 12 p 25

Allegheny Ludlum Steel Corp.:
Smoothing the Price-Volume Jitters, by G. J. McManus, June 4 p 66
What Price Stainless Steel? June 25 p 60

Alliance for Labor Action
ALA Takes its First Lump Election Vote, Feb 5 p 19

Allied Chemical Corp.:
Clean Up Pollution Control Mess, by P. J. Cathey, June 4 p 62
Metal Stamping Suits Plastic, Apr 9 p 77

Allied Farm Equipment, Inc.:
Farm Equipment: Year of the Locust, by K. W. Bennett, May 21 p 64

Allis-Chalmers:
Farm Equipment: Year of the Locust, by K. W. Bennett, May 21 p 64

Allison-Campbell Div.:
Adaptive Control Lowers Cutting Cost, by T. H. Malim, June 25 p 63

Alloys Unlimited, Inc.:
Are Two Metals Better Than One? by A. M. Greene and R. R. Irving, Apr 30 p 68

Aluminum
Aluminum Car Radiators: If at First You Don't Succeed, . . . by James Beizer, Jan 15 p 99
Aluminum Demand Continues its Strong Pace, by James Beizer, Feb 19 p 153
Aluminum for International Markets Up 0.5¢, by James Beizer, Apr 23 p 149
Aluminum PM Parts: A Good Start, by B. D. Wakefield, Mar 17 p 60
Aluminum Swings to Strip Casting, by G. J. McManus, Mar 26 p 73
GM's Aluminum Engine Takes a Bow, by D. N. Williams, Apr 30 p 23
Government Figures Tell it Like it Was, by James Beizer, Mar 12 p 171
How Aluminum Dodged a First Quarter Downturn, by James Beizer, Apr 2 p 117
How Aluminum Engines are Made, by W. G. Patton, May 28 p 104
Is This the Time for Aluminum Price Hike? Apr 16 p 52
Selling Metals Was Never Like This, by K. W. Bennett, May 7 p 57
'70 Shapes Up as Another Bright Year for Aluminum, by James Beizer, Apr 9 p 111
Strong Aluminum Alloy Checks Corrosion, Feb 5 p 28
World's Product Hunger Unslaked, by G. J. McManus, Apr 2 p 55

Aluminum Assn.:
Metalworking Gets Crack at Forming New SIC Categories, Mar 26 p 61
Optimism is the Name of the Game for Aluminum Industry, by James Beizer, June 11 p 153

Aluminum Co. of America
Aluminum Car Radiators: If at First You Don't Succeed, . . . by James Beizer, Jan 15 p 99
Aluminum for International Markets Up 0.5¢, by James Beizer, Apr 23 p 149
Aluminum PM Parts: A Good Start, by B. D. Wakefield, Mar 19 p 60
Are Two Metals Better Than One? by A. M. Greene and R. R. Irving, Apr 30 p 68
Can Quality Control be Defect Free? by G. J. McManus, June 18 p 59

Aluminum Industry
Government Figures Tell it Like it Was, by James Beizer, Mar 12 p 171
How Aluminum Dodged a First Quarter Downturn, by James Beizer, Apr 2 p 117
Is This the Time for Aluminum Price Hike? Apr 16 p 52
Optimism is the Name of the Game for Aluminum Industry, by James Beizer, June 11 p 153
'70 Shapes Up as Another Bright Year for Aluminum, by James Beizer, Apr 9 p 111

American Assn. for the Advancement of Science
Effetes View Science: 'A Sorry State', by D. N. Williams, Jan 8 p 51

American Aviation Corp.:
Adhesive Bonding Bonanza Beckons, by B. D. Wakefield, May 7 p 84

American Can Co.:
For American Can, a Substantially Reduced Base, by James Beizer, Feb 26 p 93

American Chain & Cable Co.:
Adaptive Control Lowers Cutting Cost, by T. H. Malim, June 25 p 63

American Cyanamid Co.:
Air Cleanup Starts with Your Car, by K. W. Bennett, Jan 8 p 50

American Federation of Labor/CIO
AFL-CIO Pushes for Import Quota Recipe, by K. A. Kaufman, May 28 p 19
Building Trades Asked to Drop Veto Power, Jan 29 p 17
Building Trades Move to Speed-Up Work Disputes, Apr 16 p 17
Hands-Off Bargaining? Meany Never Heard of It, Mar 5 p 17
Meany Calls Philly Plan Political Scapegoat, Jan 22 p 17
Meany Stumps for Wage, Price Controls—Again, Feb 26 p 19

American Gas Assn.:
Well, How About an Energy Day? by K. W. Bennett, May 14 p 47

American Hoist & Derrick Co.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

American Institute of Certified Public Accountants
Accountants Move to Slow Down 'Instant Earnings', by K. A. Kaufman, Mar 12 p 91

American Iron and Steel Institute
AISI: Profits, Prices and Fat Pacts, by G. J. McManus, June 4 p 57
Steel Boom Weakens Quota Cries, by K. A. Kaufman, June 11 p 86
What Price Stainless Steel? June 25 p 60
Who's Going to Harness Builders? by G. J. McManus, Mar 26 p 64

American Machine & Foundry Co.:
Robots March Into Metalworking, by B. D. Wakefield, May 7 p 79

American Machine Tool and Distributors Assn.:
Machine Tools Take February Nosedive, by R. A. Wilson, Apr 2 p 60

American Management Assn.:
Clean Up Pollution Control Mess, by P. J. Cathey, June 4 p 62
Computers: Here Comes Facility Man, by P. J. Cathey, Mar 5 p 49
Get Maximum Mileage from Recruiting, Jan 15 p 56
Managers Need Anti-Migraine Warranty, Apr 30 p 27
Wage Plans: Smorgasbord, Anyone? by P. J. Cathey, Jan 15 p 56

American Metal Climax, Inc.:
Did the Good Dr. H. Lay an Egg? by James Beizer and K. A. Kaufman, May 14 p 50
Needed: Adequate Copper Supplies at Predictable Prices, by James Beizer, Mar 26 p 107

American Motors Corp.:
AMC's Gremlin Leads Detroit Small Car Parade, by D. N. Williams, Jan 22 p 43
U. S. Mini Cars vs the Imports, by James Beizer, and D. N. Williams, Apr 9 p 55
U. S. Small Car Race Heats Up, by D. N. Williams, June 4 p 21

American Optical Corp.:
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

American Society of Assn. Executives
Nixon: Don't Lose Faith in the Economy, by K. A. Kaufman, May 7 p 19

American Society of Mechanical Engineers
1970 Design Show Unwraps 1969 R & D Efforts, Apr 30 p 78

American Society for Nondestructive Testing
Nondestructive Testing; Emphasis on Operators, Jan 29 p 62

American Society of Quality Control
Can Quality Control be Defect Free? by G. J. McManus, June 18 p 59

American Society of Tool and Manufacturing Engineers
SEE Society of Manufacturing Engineers

American Textile Manufacturers Institute
Textile Talks May Have Metalworking Twist, Mar 26 p 25

American Tool Works Co.:
Low Costs Develop for NC Lathes, by T. H. Malim, May 21 p 86

American Welding Society
The AWS Welding Show Better Late than Never, June 18 p 28
Welding's Future Throws Sparks, Jan 22 p 47

American Zinc Co.:
Sales Down, Stocks Up, Zinc Prices Have to Dip, by James Beizer, Mar 19 p 45

Anderson Clayton & Co.:
Executive Comp—As You Like It, Feb 19 p 25

Armco Steel Corp.:
AISI: Profits, Prices and Fat Pacts, by G. J. McManus, June 4 p 57
Armco Tries to Shake Australian Iron Tree, by G. J. McManus, June 25 p 44
Job Market Tight as Recruiting Slips, by S. M. Rivkin, Mar 19 p 51
Justice Dept. Auditions, "I Am Curious, Merger", Jan 15 p 58
PH Stainless Challenges Titanium, by N. B. Schwartz, Feb 5 p 59
Radicals Kidnap Pollution Baby, by R. A. Wilson, Jan 29 p 42

Associated Equipment Distributors
If They're Nervous, it Doesn't Show, by K. W. Bennett, Feb 5 p 46

Auerbach Corp.:
Exposing Computer's Feet of Clay, Feb 26 p 27

Australia
Armco Tries to Shake Australian Iron Tree, by G. J. McManus, June 25 p 44

Autoclave Engineers, Inc.:
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55

Automation
Foreign Steelmen Covet Computers, Apr 16 p 65
Robots March Into Metalworking, by B. D. Wakefield May 7 p 79
Watch the Robot Plug Himself In, by K. W. Bennett and D. N. Williams, Apr 16 p 47

Automobiles
AMC's Gremlin Leads Detroit Small Car Parade, by D. N. Williams, Jan 22 p 43
Adaptive Systems: "Look Ma, No Hands", by D. N. Williams, Jan 1 p 23
Air-Bag a 'Must' on '72 Cars, by D. N. Williams, Mar 26 p 23
"Air Bag's Got Bugs", say Automen, by D. N. Williams, May 21 p 23
Aluminum Car Radiators: If at First You Don't Succeed, . . . by James Beizer, Jan 15 p 99
Automakers Chase Spring Rainbow, by D. N. Wiliams, Mar 5 p 21
Automen Agree: Maverick Hit Market 'Just Right', Apr 23 p 23
Automen Hopeful Despite 500,000 Production Slump, by D. N. Williams, Apr 9 p 21
Catalysts: Auto Pollution Solution? by D. N. Williams, May 28 p 21
Critics Strong-Arm Muscle Cars, by D. N. Williams, Feb 12 p 21
D.C. to Boston—'I'm Exhausted!', by D. N. Williams, June 18 p 23
Electronics Flirt with Fleets—Again, by D. N. Williams, Jan 15 p 21
Ford's Mobile Lab Tests Emissions, by D. N. Williams, Feb 5 p 23
Ford Thumbs Down Federal Auto Regulation, Mar 26 p 23
GM's Aluminum Engine Takes a Bow, by D. N. Williams, Apr 30 p 23
GM Dubs New Roof 'Double Shell Top', by D. N. Williams, May 14 p 21
GM Hedges on Strikes; Postpones Introductions, by D. N. Williams, May 7 p 21
GM's 60-Second Service Dash, by D. N. Williams, Jan 29 p 21
GM Spurns Detroit in New Plant Expansion, Mar 5 p 21
Interior Promises Help for Junked Car Processing, by K. A. Kaufman, Apr 9 p 19
Rebirth of Bumpers—That Bump! by D. N. Williams, Apr 16 p 21
Reynolds Wrap Up Aluminum Engine, by D. N. Williams, June 25 p 23
Sales of Auto Extras Slow Down, by D. N. Williams, Apr 9 p 21
'71 Orders Starting, So are Changeovers, June 18 p 99
Shifting Auto Trade Grinds Gears, by D. N. Williams, June 4 p 55
Steel Summary: Autos to Take 12 Pct Less Steel in 1970, Feb 26 p 91
Steel Summary: Cars, Trucks, Bucks Cloud the Picture, May 28 p 161
Steel Summary: Looking for Spring in Auto Orders, Apr 2 p 115
Steel Summary: Small Bonus in Automotive Orders, June 25 p 87
Steel Summary: Steel Sags with Autos, Jan 15 p 97
Steel Summary: Steelmakers Write Off the '70 Cars, Mar 5 p 79
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55
U. S. Mini Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55
U. S. Small Car Race Heats Up, by D. N. Williams, June 4 p 21
Urethane: Up Front . . . and Counting, by D. N. Williams, Feb 19 p 21
Welded Member in Indy Car Gives Driver the Edge, Apr 30 p 28
"Zero Defects" at Indv. by N. B. Schwartz and Stan Stephenson, June 18 p 65

Automotive Industry, Weekly Reports of Inside and Outside Influences (See Also D. N. Williams)

Automotive Industry
Automakers Chase Spring Rainbow, by D. N. Williams, Mar 5 p 21
Automen Hopeful Despite 500,000 Production Slump, by D. N. Williams, Apr 9 p 21
Catalysts: Auto Pollution Solution? by D. N. Williams, May 28 p 21
Disc Brakes Grab for the Big Rigs, by D. N. Williams, Jan 8 p 21
GM Suppliers SPEARed for Quality, by D. N. Williams, Jan 22 p 21
Only Gloom is Moving Well in Detroit, by D. N. Williams, May 7 p 64
Price War Ahead for Pollution Kits? by D. N. Williams, Mar 19 p 19
Sale of Auto Extras Slow Down, by D. N. Williams, Apr 9 p 21
Shifting Auto Trade Grinds Gears, by D. N. Williams, June 4 p 55
Standardization Claims First Victim, Mar 12 p 21
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55

Avco Corp.:
Will Titanium Brazing Bridge Joining Gap? Mar 5 p 62

Axicom Systems, Inc.:
Why Computers Fail . . . Or Succeed, by J. E. Sandford, Apr 30 p 63

B

BFS Psychological Associates, Inc.:
The Corporate Dropout, Jan 1 p 81

Babcock Wilcox Co.:
Alumina Shapes Protect Steel Ingots, Apr 9 p 80

R. G. Barry Corp.:
How One Company is Doing It, Jan 29 p 25

Battelle Memorial Institute
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Batteries
Zinc-Air Battery Has What it Takes to Make Car Go, May 21 p 87

Bearings
Soviets Prevent Chips from Falling, May 28 p 100

Beckman Instruments, Inc.:
Taking Guesswork Out of Steel Measuring, June 4 p 77

Bell Aerosystems Co.:
Ships Skim Over Water on Bubbles, Jan 22 p 66

Bendix Automotive & Automation Co.:
Retrofitting Seeks its Market Fit, by R. A. Wilson, Mar 26 p 60

Bendix Corp.:
Adaptive Systems: "Look Ma, No Hands", by D. N. Williams, Jan 1 p 23
Disc Brakes Grab for the Big Rigs, by D. N. Williams, Jan 8 p 21
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

Bethlehem Steel Corp.:
Court Says Steel's Odd Couple Discriminates, by K. A. Kaufman, May 7 p 62
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65
Dry Dock Launches New Ideas, Mar 19 p 64
Hurry, You've Only Got a Year, by G. J. McManus, Feb 12 p 47
'Nasty Surprises' Stalk Steel's Year, by G. J. McManus, June 11 p 81
Shipbuilders Tie Up to Systems, by I. G. Black, Feb 12 p 53
Steelmen Dust Off New Plant Plans, by G. J. McManus, Apr 9 p 61
Steel's Profits Fall So Prices Rise, by G. J. McManus, May 7 p 60
Strikes, Market Muddle Steel Prices Into Trouble, by G. J. McManus, May 28 p 86

Serge A. Birn Co.:
Help! We're Doing Four Days Work in Five, Feb 5 p 27

Blaw-Knox Foundry & Mill Machinery, Inc.:
Computer Sets Slabbing Mill Specs, June 11 p 103

Boeing Co.:
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99
Robots March Into Metalworking, by B. D. Wakefield, May 7 p 79

AB Bofors
Low-Sulfur Steel Makes a Profit, Apr 16 p 68

Bolt, Beranek and Newman, Inc.:
Does Noise Control Need the Pill? by C. J. Suchocki, Apr 2 p 58

Borg-Warner Corp.:
Plastics Have Alloys, Too, by H. R. Clauser, May 7 p 75

Boston Edison Co.:
Well, How About an Energy Day? by K. W. Bennett, May 14 p 47

Brass
. . . After Brass Mills Post Higher Charges, by James Beizer, Jan 15 p 55
Brass Mill Prices Start to Roll Down, by James Beizer, June 25 p 89

Brazing
Copper Tubing Brazed in Volume, May 7 p 83
Will Titanium Brazing Bridge Joining Gap? Mar 5 p 62

British Leyland Motors, Inc.:
U.S. Mini Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55

British Steel Corp.:
Britain Tries to Marry Special Steel Industry, Apr 23 p 25
British Steel Fights Nagging Headaches, by I. G. Black, May 7 p 61
British Steel Prices May Get Another Boost, Jan 22 p 23
Labor Unrest Spreads from U.S. to Europe, Jan 15 p 23

Brown & Sharpe Mfg. Co.:
Machine Builders 10-Point Program, June 11 p 86

Budd Co.:
Stainless: Is the Stage Set for 200 Series? Feb 19 p 97

Buhr Machine Tool Co.:
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63

Building Construction
Building Trades Asked to Drop Veto Power, Jan 29 p 17
Building Trades Move to Speed-Up Work Disputes, Apr 16 p 17
Cabinet Members Eye Contractors' Winters of Discontent, by K. A. Kaufman, Jan 22 p 19
HUD Takes First Steps in Smashing Modular Home Bugs, by K. A. Kaufman, Mar 5 p 48
Meany Calls Philly Plan Political Scapegoat, Jan 22 p 17

XUM

Metalworking Seeks a New Home, by G. J. McManus, Feb 5 p 43
USS Has High Hopes in Housing Derby, Jan 15 p 59
U. S. Steel's Structural Proving Ground, Feb 5 p 66
Who's Going to Harness Builders? by G. J. McManus, Mar 26 p 64

Bullard Co.:
One Good Turn on Vertical Lathe Worth Two on Another, by R. A. Wilson, Feb 26 p 76

Bunker-Ramo Corp.:
Retrofitting Seeks its Market Fit, by R. A. Wilson, Mar 26 p 60

Bureau of National Affairs Inc.:
Grievance Filing Time Grow Shorter, May 7 p 17
Unions Chip Away at Management Rights, June 25 p 19

Burns International Detective Agency:
NLRB: Labor Pacts are Part of Acquisitions, May 21 p 19

Business Issues, Weekly Editorials and Forecasts (See Also Gene Beaudet)

E. A. Butler Associates, Inc.:
Unscrupulous Job Counselors Lure Many Executives, by S. H. Hockenberry, Jan 15 p 61

C

Cadillac Associates, Inc.:
Exec Job Market? Depends on What You Do, May 28 p 25
No College Graduates Need Apply? May 28 p 25
Recession Jitters? Here's a Survival Kit, Apr 9 p 25

Calgon Corp.:
Profit Hunter Bags His Quota—Plus, by K. W. Bennett, Apr 2 p 65

Canada
Agency Split Over Hike in Canadian Tinplate, Apr 30 p 25
Canada's Jawbone Needs Rewiring, by D. N. Williams, June 25 p 46
Shifting Auto Trade Grinds Gears, by D. N. Williams, June 4 p 55
Strikers Threaten to Mow Down Ore Shipments, June 11 p 17

Cans
For American Can, a Substantially Reduced Base, by James Beizer, Feb 26 p 93
Inland Cans its Tinplate Line . . . by K. W. Bennett, Mar 12 p 88

Carborundum Co.:
Graphite Tops Heat Exchanger Poll by Default, Apr 9 p 26
Plastic Behaves Like a Metal, Mar 12 p 110
Switch Line, Staff Jobs to Build Better Managers, by P. J. Cathey, May 28 p 91

Carnegie-Mellon University
Adaptive Control Lowers Cutting Cost, by T. H. Malim, June 25 p 63

Carson Laboratories, Inc.:
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Casting, Continuous
Aluminum Swings to Strip Castings, by G. J. McManus, Mar 26 p 73
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71
NC Patterns for Castings: 'Nothing Earthshaking'? by D. N. Williams, Mar 26 p 63

Castings, Die
Die Materials for Ferrous Die Casting Pass Test, Feb 26 p 28
Robots March Into Metalworking, by B. D. Wakefield, May 7 p 79

Casting, Sqeeze
Squeeze Casting Has U. S. Friends, by B. D. Wakefield, May 28 p 97

Caterpillar Tractor Co.:
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

Center for Venture Management
New Approach: Think Small in a Big Way, Jan 22 p 25

Centrifugal Compressors
Centrifugals Fill Gap in Air Power, by J. J. Obrzut, Apr 9 p 78

Ceramic Engineering Co. Ltd.:
NC Rack Grinding Beats the Clock, Mar 26 p 80

Cerro Copper & Brass Co.:
Curing Die Lubrication Complaints, Feb 26 p 75

Cerro Corp.:
Lead and Zinc Men Discuss Marketing Future, June 11 p 85

Chemetron Corp.:
Welding's Future Throws Sparks, Jan 22 p 47

Chicago Bridge & Iron Co.
Field Fabrication's the Answer for Giant Nuclear Vessels, by B. D. Wakefield, Apr 30 p 76
Nuclear Maching is for Elephants, June 25 p 58
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

China
China Offers Glad Hand to Japanese Toolmen, June 18 p 25

Christiania Spigerverk
Foreign Steelmen Covet Computers, Apr 16 p 65

Chrysler Corp.
Forging PM Preforms: Say When, by N. B. Schwartz, June 25 p 55
Jobs Pile Up for Ductile Iron, by W. G. Patton, May 21 p 80
U. S. Mini Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55

Chusid & Co.:
Unscrupulous Job Counselors Lure Many Executives, by S. H. Hockenberry, Jan 15 p 61

Cincinnati Milling Machine Co.: See Also: Cincinnati Milacron

Cincinnati Milacron
How Safe is High-Speed Grinding? June 11 p 105

Cincinnati Milling Machine Co.:
Machine Tool Controls: Whose Business Is It? by R. A. Wilson, Feb 12 p 45
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63
Mini-Computers Make Big NC Waves, by J. E. Sandford, Feb 19 p 102
Retrofitting Seeks its Market Fit, by R. A. Wilson, Mar 26 p 60
Tackling Pollution Piecemeal, Mar 5 p 64

CITCO
Diamonds Dig Into Stainless, Mar 5 p 66

City College of New York
The Corporate Dropout, Jan 1 p 81

Cleveland Welding Training Center
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

Coal
Coal: Dusting Off a Sooty Image, by G. J. McManus, Jan 8 p 47
Somebody Has to Pay . . . But Who? by G. J. McManus and K. A. Kaufman, Apr 9 p 58

Coatings
Refractories Start Where Metals End, Feb 5 p 62

Coils
Copper Coils Close Interruption Gap, Mar 19 p 62
Dip-Forming Uncurls for Copper Rod, by James Beizer, June 25 p 42
Nuts in Coils Speed Production, May 21 p 88
Taking Guesswork Out of Steel Measuring, June 4 p 77

Coke
Coal: Dusting Off a Sooty Image, by G. J. McManus, Jan 8 p 47
Japanese Systems Cut Gas and Coke Problems, May 21 p 25

College Placement Council
Recruiting is Less Feverish, Jan 22 p 25

Columbia Broadcasting System, Inc.:
Commandments for Effective MIS, Mar 5 p 49

Columbia Gas Systems, Inc.:
Well, How About an Energy Day? by K. W. Bennett, May 14 p 47

Combustion Engineering, Inc.:
Flux Blending Gets New Twists, Mar 5 p 60

Committee on Economic Development
Keep That Surcharge Rolling in This Year, CED Urges, by K. A. Kaufman, Jan 1 p 21

Commonwealth Edison Co.:
Earth Day: All Heat, No Light? Apr 30 p 53
Liquid Natural Gas Begins to Look Better, Apr 9 p 58
Somebody Has to Pay . . . But Who? by G. J. McManus and K. A. Kaufman, Apr 9 p 58
Well, How About an Energy Day? by K. W. Bennett, May 14 p 47

Communication Systems
One Wire Does the Work of Many, by A. M. Greene, Feb 19 p 104

Composite Materials
Explosive Bonding Pacts Strength Into Metal Composites, Jan 29 p 60
Glass Composites Get "Deep-Six", Jan 29 p 26

Computers
Are Manager Hunches More than Hunches? Mar 5 p 25
Computer Sets Slabbing Mill Specs, June 11 p 103
Computers Crimp Riveting Problems, Apr 30 p 72
Computers Getting More Friendly, Jan 8 p 25
Computers: Here Comes Facility Man, by P. J. Cathey, Mar 5 p 49
Computers Show Tools the Way, June 4 p 78
Computers Thrive in Terminal Atmosphere, May 14 p 26
Every Manager's Dream: His Own Computer, Jan 8 p 25
Exposing Computer's Feet of Clay, Feb 26 p 27
Foreign Steelmen Covet Computers, Apr 16 p 65
GE-Honeywell Tie: Backlash for NC? by R. A. Wilson, May 28 p 87
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63
Maxi-Uses for Mini-Computers, by T. H. Malim, Mar 12 p 101
Mini-Computers Make Big NC Waves, by J. E. Sandford, Feb 19 p 102
New Unit Joins Race to Age NC Controls, by R. A. Wilson, June 4 p 60
The Progress of Process Computers, Jan 29 p 55
Shipbuilders Tie Up to Systems, by I. G. Black, Feb 12 p 53
Steel in a World of Computers, by A. M. Greene, Feb 26 p 67
Why Computers Fail . . . Or Succeed, by J. E. Sandford, Apr 30 p 63

Conservation
Ah, Wilderness! Boo! Throw Him Out! by Gene Beaudet, Mar 12 p 5
Ah, Wilderness! Whose? And What For! by Gene Beaudet, Feb 19 p 5
Earth Day: All Heat, No Light? Apr 30 p 53
Earth Day: Is it Really More Romantic to Tear Down? Apr 23 p 89
Fumbling the Conservation Ball, by I. G. Black, Apr 16 p 51
Mining's Public Land Prospects Soar, by James Beizer and K. A. Kaufman, June 25 p 49
Will Earth Week Go Up in Smoke? by Gene Beaudet, Apr 30 p 5

Consolidation Coal Co.:
Coal: Dusting Off a Sooty Image, by G. J. McManus, Jan 8 p 47
Somebody Has to Pay . . . But Who? by G. J. McManus and K. A. Kaufman, Apr 9 p 58

Construction Industry
Construction: Everyone Makes His Own Deal! Mar 19 p 15
If They're Nervous, it Doesn't Show, by K. W. Bennett, Feb 5 p 46
Who's Going to Harness Builders? by G. J. McManus, Mar 26 p 64

Consumerism
Managers Need Anti-Migraine Warranty, Apr 30 p 27
Mr. Consumer, It's Your Move Now, by J. B. Baxter, May 14 p 55
Senate Commerce Panel Okays Guaranty Measure, by K. A. Kaufman, May 14 p 19
Take Long-Term View on Consumerism, Apr 30 p 27

Continental Machine Tool Co.:
Abrasive Saw System Cuts and Carries, May 7 p 78

Copper
Antitrust Suit Slams Copper Prices, by James Beizer, June 18 p 52
Can Washington Live with 60¢ Copper? by James Beizer, Apr 9 p 60
A Copper Calm? Well, There's Usually Something to . . ., by James Beizer, Mar 5 p 81
Copper Coils Close Interruption Gap, Mar 19 p 62
Copper Figures Don't Tell Full Story, by James Beizer, Feb 5 p 83
Copper Prices: LME Down, U. S. Steady, by R. A. Wilson, Feb 12 p 52
Copper Probe: Come to Terms with What? by Gene Beaudet, Jan 22 p 5
Copper Procedures Ready for U. S. Investigators, by James Beizer, Jan 29 p 73
Copper Tubing Brazed in Volume, May 7 p 83
Copper: What About Free Choice? by James Beizer and K. A. Kaufman, Mar 19 p 48

Did the Good Dr. H. Lay an Egg? by James Beizer and K. A. Kaufman, May 14 p 50
Dip-Forming Uncurls for Copper Rod, by James Beizer, June 25 p 42
Doc Houthakker: Don't Mess Things Up More! by Gene Beaudet, Mar 19 p 5
A Good Metal-Like Copper-is Hard to Find, by James Beizer, Apr 30 p 105
Government Panel Drags Copper Price Issue into the Daylight, by James Beizer, Jan 22 p 77
Is Washington Hiding the Copper Industry Study? by James Beizer, May 7 p 107
It Looks Like a Steady, Fast Slide for Outside Copper Prices, by James Beizer, May 21 p 111
Needed: Adequate Copper Supplies at Predictable Prices, by James Beizer, Mar 26 p 107
Nixon Panel to Probe Copper Prices . . ., by James Beizer and K. A. Kaufman, Jan 15 p 54
Stampers Eye Copper Substitutes, by B. D. Wakefield, Apr 30 p 74
Sticks and Stones, No Broken Bones, by K. A. Kaufman and James Beizer, May 28 p 84
Stop Raising Prices, Copper Producers Urged, by James Beizer, Feb 12 p 95
Surprise! Copper Prices are Up Again, by James Beizer, Jan 8 p 87
Tubing that Transfers Heat Faster, Mar 12 p 107

Copper Development Assn.:
Electrics Flirt with Fleets—Again, by D. N. Williams, Jan 15 p 21

Copper Institute
Copper Institute Figures Don't Tell Full Story, by James Beizer, Feb 5 p 83

Copper Range Co.:
Surprise! Copper Prices are Up Again, by James Beizer, Jan 8 p 87

Council of Economic Advisors
CEA Prodded to Form Price-Wage Limits, by K. A. Kaufman, Apr 2 p 21
Copper: What About Free Choice? by James Beizer and K. A. Kaufman, Mar 19 p 48
Is Washington Hiding the Copper Industry Study? by James Beizer, May 7 p 107
Jawbone Wage-Price Control is Dead; CEA Feels, by K. A. Kaufman, Feb 26 p 21
Nixon Panel to Probe Copper Prices . . ., by James Beizer and K. A. Kaufman, Jan 15 p 54
Price Controls: Is Jawboning a Workable Policy? by K. A. Kaufman, Jan 29 p 19
Sticks and Stones, No Broken Bones, by K. A. Kaufman and James Beizer, May 28 p 84

Craco Products Operation
Computers Crimp Riveting Problems, Apr 30 p 72

Creare, Inc.:
Gas Seeks Out Powder Metal Flaws, by T. H. Malim, June 25 p 59

Cris Associates Agency, Inc.:
Welcome Mat for the Veterans? Apr 9 p 25

Cross Co.:
Machine Tool Controls: Whose Business Is It? by R. A. Wilson, Feb 12 p 45
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55
Watch the Robot Plug Himself In, by K. W. Bennett and D. N. Williams, Apr 16 p 47
Yankee Machine Tool Maker Sets Up First Far East Shop, by D. N. Williams, Jan 29 p 45

Culligan, Inc.:
Profits Lure Industry Overseas . . ., by K. W. Bennett, May 28 p 88

Cutler-Hammer, Inc.:
Interferometer for Low-Budget Shops, Mar 26 p 81

Cutting Tools
Abrasive Saw System Cuts and Carries, May 7 p 78
Adaptive Control Lowers Cutting Cost, by T. H. Malim, June 25 p 63
Computers Show Tools the Way, June 4 p 78
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

Cyclops Corp.:
Cyclops Eyes Detroit Steel, by D. N. Williams, Apr 2 p 57

Cylinders
Tank Industry: Lonely Bull Kicks Its Heels Up-High, by K. W. Bennett, June 11 p 83

D

Dana Corp.:
Standardization Claims First Victim, by D. N. Williams, Mar 12 p 21

Danly Machine Corp.:
Press Builders Take Systems Path, by B. D. Wakefield, Mar 5 p 57

Data General Corp.:
Maxi-Use for Mini-Computers, by T. H. Malim, Mar 12 p 101

Defense
Defense Accounting Bill Faces Senate Block, by K. A. Kaufman, June 4 p 19
Defense Accounting Rules Get Green Light, May 21 p 21
Defense Spending Rides the Down Elevator, by K. A. Kaufman, Mar 5 p 19
Federal Tools Get 5-Year Phase-Out, by K. A. Kaufman, May 14 p 53

DePaul University
Personality Wars: Causes, Symptoms, Cures, May 21 p 27

Design Digest—Weekly Report of New Materials, Components and Design Ideas

Design Engineering
Give U. S. Designer a (Helping) Hand, by K. W. Bennett, Mar 5 p 52

Desulfurization
Japanese Systems Cut Gas and Coke Problems, May 21 p 25

Detroit Steel Corp.:
Cyclops Eyes Detroit Steel, by D. N. Williams, Apr 2 p 57

Deutsch, Shea & Evans, Inc.:
The New Migrants—Technicians, Mar 12 p 25

Dies
Curing Die Lubrication Complaints, Feb 26 p 75

Digital Equipment Corp.:
Maxi-Uses for Mini-Computers, by T. H. Malim, Mar 12 p 101

Disc Brakes
Disc Brakes Grab for the Big Rigs, by D. N. Williams, Jan 8 p 21

Dissimilar Metals
Are Two Metals Better Than One? by A. M. Greene and R. R. Irving, Apr 30 p 68

Dominion Foundries and Steel Ltd.:
Agency Split Over Hike in Canadian Tinplate, Apr 30 p 25

Drexel University
Why Study PM Fundamentals? May 7 p 26

Drilling
Microcracking Eliminated in Laser Drilling, Apr 2 p 28

Drive Shafts
Shafts Fatigue Less After Salt Bath, Mar 19 p 66

Ductile Iron Society
Jobs Pile Up for Ductile Iron, by W. G. Patton, May 21 p 80

E. I. duPont de Nemours & Co.:
Are Two Metals Better Than One? by A. M. Greene and R. R. Irving, Apr 30 p 68

Dura Corp.:
NLRB: Labor Pacts are Part of Acquisitions, May 21 p 19

E

Eastern Associated Coal Corp.:
Coal: Dusting Off a Sooty Image, by G. J. McManus, Jan 8 p 47

Eaton Yale & Towne, Inc.:
Hydrostatics Pressure into Machine Tools, Conveyors, by D. N. Williams, Jan 8 p 53
Will Positive Thinking Really Work? by G. J. McManus, June 18 p 57

Economics
Ailing Economy Feels a Touch of Price-Cutitis, June 11 p 84
Budget Skirts Between Inflation and Recession, by K. A. Kaufman, Feb 5 p 50
Buyers Drag Feet on Paying Up, by R. A. Wilson, Apr 23 p 87
CEA Prodded to Form Price-Wage Limits, by K. A. Kaufman, Apr 2 p 21
Canada's Jawbone Needs Rewiring, by D. N. Williams, June 25 p 46
The Case for Wage and Price Controls, by Gene Beaudet, Feb 12 p 5
Common Market Launches Monetary Reserve Pool, Feb 26 p 25
Dr. McCracken: We Sure Hope You are Right, by Gene Beaudet, Mar 26 p 5
Fed Relaxes Grip on Fiscal Squeeze, by K. A. Kaufman, Mar 26 p 59
Ford Slams Anti-Inflation Measures, by D. N. Williams, May 21 p 63
Guidelines, Yes . . . Controls, No, May 28 p 81
Here's an All-purpose Economic Report, June 4 p 25
If They're Nervous, it Doesn't Show, by K. W. Bennett, Feb 5 p 46
Is it Time to Stop Cooling It? by Gene Beaudet, Apr 23 p 5
It Was a Very Bad Year for Steel Profits, by G. J. McManus, Feb 5 p 48
It's the Game that Counts, Not the Plan, by Gene Beaudet, May 28 p 5
Jawbone Wage-Price Control is Dead, CEA Feels, by K. A. Kaufman, Feb 26 p 21
Labor '70: Color it Green and Angry, by C. J. Suchocki, Jan 1 p 72
Layoffs Point to Black Days Ahead, by K. W. Bennett, Jan 15 p 51
Money Supply: What's With It? by R. D. Shapiro, Mar 12 p 96
Mr. Consumer, It's Your Move Now, by J. B. Baxter, May 14 p 55
Mr. President, Let's Cut Down the Options, by Gene Beaudet, June 11 p 5
1970 Business: Is Someone Crying Wolf? by Gene Beaudet, Jan 1 p 69
Nixon Cools Heels on Request for Nontariff Trade Powwow, by K. A. Kaufman, Mar 19 p 17
Nixon: Don't Lose Faith in the Economy, by K. A. Kaufman, May 7 p 19
Nixon Speech Draws Mixed Reviews, June 25 p 39
Not Even Casey Could Explain This, by Gene Beaudet, Apr 16 p 5
Now that the Slowdown is Here . . ., by J. D. Baxter, Mar 5 p 44
Only Gloom is Moving Well in Detroit, by D. N. Williams, May 7 p 64
Price Controls: Is Jawboning a Workable Policy? by K. A. Kaufman, Jan 29 p 19
Recession Jitters? Here's a Survival Kit, Apr 9 p 25
Silence May be Golden, But . . ., by G. J. McManus, Mar 5 p 41
'60s Sizzle Fizzles, '70s Simmer, by S. M. Rivkin, May 28 p 83
Stock Market Got You Down? How About This? by Gene Beaudet, May 7 p 5
There's No Such Thing as Standing Still, by Gene Beaudet, June 4 p 5
Understanding is a Two-Way Street, by Gene Beaudet, Jan 29 p 5
Washington 1970: Year of Transition, by K. A. Kaufman, Jan 1 p 74
Well, 2nd Half Business Will Be . . ., June 18 p 48
What Did Mr. Nixon Really Say? by Gene Beaudet, June 25 p 5
When Will the Government Let Go? by Gene Beaudet, Mar 5 p 5

Education
And Now—Introducing the Paul Principle, Feb 19 p 25
Proxy Pressure to Pressure Managers, May 14 p 25

Electric Power Industry
Power Equipment: More Import Lumps, by G. J. McManus, Mar 19 p 43

Electric Power Production
Electric Power Pros Cut Nuclear Spending, by K. W. Bennett, Apr 30 p 60
Well, How About an Energy Day? by K. W. Bennett, May 14 p 47

Electron Beams
EB Unit Works Hard in Soft Vacuum, Mar 12 p 108
Forging Teamwork Boosts Titanium, May 21 p 84
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Electronic Devices & Controls
Adaptive Controls Move into Rolling Mills, Feb 12 p 26
One Wire Does the Work of Many, by A. M. Greene, Feb 19 p 104
Pulpits Pack Factory-Tested Punch, by A. M. Greene, Mar 5 p 63

Electronic Industries Assn.:
Consumers Backers Press for Warranty Bill Passage, by K. A. Kaufman, Feb 5 p 21

Electroslag
An Electroslag Welded Vessel? Feb 5 p 68

Emerson Electric Co.:
"Involved Managers Welcome Change", by P. J. Cathey, Feb 26 p 62

Employment
Exec Job Market? Depends on What You Do, May 28 p 25
No College Graduates Need Apply? May 28 p 25

Engelhard Minerals & Chemicals Corp.:
Air Cleanup Starts with Your Car, by K. W. Bennett, Jan 8 p 50

XUM

Engineers
Coming: A New Breed of Engineer, Jan 15 p 25
Technical Manpower Pool Needs Filling, Jan 8 p 17

Engines, Automobile
GM's Aluminum Engine Takes a Bow, by D. N. Williams, Apr 30 p 23
How Aluminum Engines are Made, by W. G. Patton, May 28 p 104
Is GM Trying to Wangle the Wankel? by D. N. Williams, June 11 p 21
Reynolds Wrap Up Aluminum Engine, by D. N. Williams, June 25 p 23

Ethyl Corp.:
Lead: "Scapegoat for the Auto Emission Hassle", by James Beizer, Apr 16 p 91

Etiwanda Steel Products, Inc.:
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71

Europe
Labor Unrest Spreads from U. S. to Europe, Jan 15 p 23

European Economic Community
Common Market to Extend Duty-Free Imports of Steel, Jan 29 p 23
Common Market Launches Monetary Reserve Pool, Feb 26 p 25
Don't Tie Us Up, Exporters Urge U. S., by K. W. Bennett, Feb 26 p 54

Ex-Cell-O Corp.:
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55

Executives, Men on the Move, Who's Who in Metalworking

Executives
And Now—Introducing the Paul Principle, Feb 19 p 25
The Corporate Dropout, Jan 1 p 81
Demand for Managers Dips-But Shouldn't, Feb 12 p 25
Don't Despair—Wives Can Help, Feb 12 p 25
Exec Job Market? Depends on What You Do, May 28 p 25
Executive Comp—As You Like It, Feb 19 p 25
"Involved Managers Welcome Change", by P. J. Cathey, Feb 26 p 62
Just How Good are Outside Recruiters? Apr 23 p 27
"Mirror, Mirror on the Wall . . ., June 25 p 27
More Claw Marks on the Way to the Top, Feb 26 p 27
Recession Jitters? Here's a Survival Kit, Apr 9 p 25
Unscrupulous Job Counselors Lure Many Executives," by S. H. Hockenberry, Jan 15 p 61
The Vest-Breasted Job Hopper Paradox, Apr 23 p 27
Welcome Mat for the Veterans? Apr 9 p 25
. . ., Who is Fairest of Them All"? June 25 p 27

Executives Unlimited International, Inc.:
Unscrupulous Job Counselors Lure Many Executives, by S. H. Hockenberry, Jan 15 p 61

Exhibit Dates, Locations and Sponsors for Upcoming Shows

Extrusion
Steel Ribbon Calls Line Signals, Apr 2 p 79

F

FAG Kugelfischer Georg Schaefer
. . . . . As Foreign Producers Eye U. S., by W. J. Kalb, May 28 p 89

Falconbridge Nickel Mines Ltd.:
Nickel Plots a Course to 1.7 Billion lb Year by 1976, by James Beizer, Jan 1 p 171

Fansteel Inc.:
Two Chambers are Better than One, Mar 26 p 82

Farm Equipment
Farm Equipment: Year of the Locust, by K. W. Bennett, May 21 p 64
Ford's Iron Oxen, by D. N. Williams, Feb 26 p 23

Fasteners
Furnaces Belt Out Better Bolts, May 14 p 70
Nuts in Coils Speed Production, May 21 p 88

Federal-Mogul Corp.:
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55

Federal Reserve Bank of Philadelphia
You've Got to Have Style, Miles of Style, May 7 p 25
What Makes Delegating Difficult? May 7 p 25

Ferco Screw & Machine Co.:
Ailing Economy Feels a Touch of Price-Cutitis, June 11 p 84

Fiber Reinforcement
Steel's Salvation in a Shrinking Market . . ., by R. A. Wilson, Jan 15 p 58

Filament Wound Construction
Explosive Bonding Packs Strength Into Metal Composites, Jan 29 p 60

Finance
Accountants Move to Slow Down 'Instant Earnings', by K. A. Kaufman, Mar 12 p 91
Buyers Drag Feet on Paying Up, by R. A. Wilson, Apr 23 p 87
Fed Relaxes Grip on Fiscal Squeeze, by K. A. Kaufman, Mar 26 p 59
Federal Corporation Urges Foreign Investing, by K. A. Kaufman, Jan 22 p 46
It May be Tougher Keeping Takeover Deals Quiet, by K. A. Kaufman, Feb 19 p 19
Mystery Shrouds Steel Share Grab, by C. J. Suchocki, June 25 p 41
Nixon Urges Pension Plan Controls, Apr 2 p 62
"Priorities" Budget Can't Do it All, by K. A. Kaufman, Feb 19 p 87
Profit Hunter Bags His Quota—Plus, by K. W. Bennett, Apr 2 p 65
Record Rich and Profit Poor, Apr 9 p 62
Stock Market Got You Down? How About This? by Gene Beaudet, May 7 p 5

Finland
Finland Puts Emphasis on Metals, by H. R. Neal, Apr 30 p 58

Florida Steel Corp.:
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71

Foote Mineral Co.:
Stainless: Is the Stage Set for 200 Series? Feb 19 p 97

Ford Motor Co.:
Air-Bag a 'Must' on '72 Cars, by D. N. Williams, Mar 26 p 23
Automen Agree: Maverick Hit Market 'Just Right', Apr 23 p 23
Automen Race to Get Gas Turbines Going, by D. N. Williams, Apr 2 p 23
Computer Sets Slabbing Mill Specs, June 11 p 103
Ford Gets High Production from EB Welder, Jan 15 p 26
Ford is Horsing Around with Pinto, Claims UAW, by D. N. Williams, June 18 p 56
Ford's Iron Oxen, by D. N. Williams, Feb 26 p 23
Ford Slams Anti-Inflation Measures, by D. N. Williams, May 21 p 63
Ford Thumbs Down Federal Auto Regulation, Mar 26 p 23
Ford Undecided Over Communist Truck Query, May 14 p 23
Jobs Pile Up for Ductile Iron, by W. G. Patton, May 21 p 80
Nipponese See Ford Buys as Bid for Auto Move, June 4 p 23
Price War Ahead for Pollution Kits? by D. N. Williams, Mar 19 p 19
Rebirth of Bumpers—That Bump! by D. N. Williams, Apr 16 p 21
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55
U. S. Mini Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55
U. S. Small Car Race Heats Up, by D. N. Williams, June 4 p 21
Will Mr. Ford Get It in the Neck? by Gene Beaudet, May 14 p 5

Forecasting
Bullish Scrap Market Charges into the '70s, Jan 1 p 172
Business and the '70's, 3-Will Malaise Settle Over U. S. Industry? by Gene Beaudet, Jan 15 p 5
Business and the '70's, 1-Wishing Won't Make it So, by Gene Beaudet, Jan 1 p 5
Growth Slowdown Seen for Primary Metals in '70, by K. A. Kaufman, Jan 8 p 19
If They're Nervous, it Doesn't Show, by K. W. Bennett, Feb 5 p 46
Labor '70: Color it Green and Angry, by C. J. Suchocki, Jan 1 p 72
Look at Managing in the Year 2000, Jan 1 p 27
Nickel Plots a Course to 1.7 Billion lb Year by 1976, by James Beizer, Jan 1 p 171
1970 Business: Is Someone Crying Wolf? by Gene Beaudet, Jan 1 p 69
'70 Shapes Up as Another Bright Year for Aluminum, by James Beizer, Apr 9 p 111
Steel Summary: Decade of Change in the Seventies, Jan 1 p 169
Steel Summary: Looking for Spring in Auto Orders, Apr 2 p 115
Technology May Take Back Seat, Jan 1 p 27
Well, 2nd Half Business Will Be . . ., June 18 p 48
What Happened to the February Dip? by K. W. Bennett, Feb 26 p 56
What's 50 Million Folks Among Friends? May 28 p 83

Foreign Trade
AFL-CIO Pushes for Import Quota Recipe, by K. A. Kaufman, May 28 p 19
. . . . . As Foreign Producers Eye U. S., by W. J. Kalb, May 28 p 89
Booming World Steel Bends Quota Systems—a Little, by G. J. McManus, Feb 19 p 83
British Budget Smiles Favorably on Industry, May 7 p 23
Common Market to Extend Duty-Free Imports of Steel, Jan 29 p 23
Don't Tie Us Up, Exporters Urge U.S., by K. W. Bennett, Feb 26 p 54
Foreign Builders Move In on Materials Handling, by R. A. Wilson, May 21 p 66
How to Succeed in Business—Overseas, June 18 p 27
Machine Builders 10-Point Trade Program, June 11 p 86
Newest Quiz Craze: Hitting the Big Export Jackpot, by R. A. Wilson, June 18 p 55
Nixon Cools Heels on Request for Nontariff Trade Powwow, by K. A. Kaufman, Mar 19 p 17
Profits Lure Industry Overseas . . ., by K. W. Bennett, May 28 p 88
Scrap Export Controls? Not Likely, by K. A. Kaufman, Feb 26 p 53
Scrap Exports: Laclede Seeks Help for a 'Gored Ox', June 4 p 59
Scrap Industry Bucks Laclede Drive to Curb Scrap Exports, by K. A. Kaufman, June 25 p 43
Shifting Auto Trade Grinds Gears, by D. N. Williams, June 4 p 55
Steel Backs Off From Quota Demands, by K. A. Kaufman, Apr 23 p 88
Steel Boom Weakens Quota Cries, by K. A. Kaufman, June 11 p 86
Steel Summary: Export Gain Offsets Domestic Dip, Feb 19 p 151
Steel Summary: Exports Gain on Imports, Mar 12 p 169
Steel Summary: World Market Moves to Equilibrium, Apr 9 p 109
Steelmen Argue Over Global View, by H. R. Neal and G. J. McManus, May 21 p 68
Tax Break for Domestic Exporters? by K. A. Kaufman, May 21 p 67
Textile Talks May Have Metalworking Twist, Mar 26 p 25
Toolmen Play Both Sides of the Oceans, by R. A. Wilson, Mar 5 p 45
Toolmen Plumb Ventures in Japan, by R. A. Wilson, Mar 19 p 46
U. S. Mini Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55
World Market Battles for U. S. Scrap, by K. W. Bennett, Mar 5 p 47
World Trade and the Problems from Within, by Gene Beaudet, June 18 p 5
World's Product Hunger Unslaked, by G. J. McManus, Apr 2 p 55

Forging Industry
Forging Image Needs Two-Sided Uplifting, by R. A. Wilson, Feb 19 p 86

Forging Industry Assn.:
Forging Image Needs Two-Sided Uplifting, by R. A. Wilson, Feb 19 p 86
Metalworking Gets Crack at Forming New SIC Categories, Mar 26 p 61

Forgings
Forging PM Preforms: Say When, by N. B. Schwartz, June 25 p 55
Forging Teamwork Boosts Titanium, May 21 p 84

Foundry Equipment Manufacturers' Assn.:
Foundry Equipment: Why the Deluge? by R. A. Wilson, June 25 p 45

Foundry Industry
Foundry Equipment: Why the Deluge? by R. A. Wilson, June 25 p 45
Foundrymen Flounder for Price Gauge, by R. A. Wilson, Apr 2 p 61
GM's New Cupola Blows Continuous Melting Process, by R. A. Wilson, Apr 16 p 49
Jobs Pile Up for Ductile Iron, by W. G. Patton, May 21 p 80

Fraternal Assn. of Steel Haulers
FASH Hit with Injunction; Teamsters Seek Damages, May 21 p 19
Steel Summary: Explosive Strike Pressures Grow, May 21 p 109
Steel Summary: Trucker Accord Comes None Too Soon, June 4 p 101
Teamsters Dangle Carrot Before Steel Haulers, May 14 p 17
Teamsters Walkout Threatens Shutdowns, Apr 23 p 90
Trucker Wildcats Give Steelmen Big Headache, Apr 16 p 50
Truckers Threaten Strikes Despite Tentative Accord, Apr 9 p 17

Fuel Cells
What's Happening to Fuel Cells? by A. M. Greene, Mar 19 p 57

Fuji Iron & Steel Co.:
U. S. Steelmen of Two Minds on Nippon Merger, Apr 9 p 23

Furnaces, Electric
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65
GM's New Cupola Blows Continuous Melting Process, by R. A. Wilson, Apr 16 p 49
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71
Scrap Price Jolts Electric Furnaces, by K. W. Bennett, Feb 5 p 51

Furnaces, Melting
Two Chambers are Better than One, Mar 26 p 82

G

Galvanizing
Galvanized: More Price Backtracking, by K. W. Bennett, June 4 p 58

Gas Turbines
Automen Race to Get Gas Turbines Going, by D. N. Williams, Apr 2 p 23

Gears
Soviets Prevent Chips from Falling, May 28 p 100
Systems that Keep the Automakers on Top, by W. G. Patton, Jan 22 p 55

General Dynamics Corp.:
Can Quality Control be Defect Free? by G. J. McManus, June 18 p 59
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

General Electric Co.:
Adaptive Controls Move into Rolling Mills, Feb 12 p 26
Are Two Metals Better Than One? by A. M. Greene and R. R. Irving, Apr 30 p 68
Are You a Decider or Multiplier Manager? Mar 26 p 27
Computers Show Tools the Way, June 4 p 78
The Corporate Dropout, Jan 1 p 81
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71
Dip-Forming Uncurls for Copper Rod, by James Beizer, June 25 p 42
Earth Day: All Heat, No Light? Apr 30 p 53
Foreign Builders Move In on Materials Handling, by R. A. Wilson, May 21 p 66
Forging PM Preforms: Say When, by N. B. Schwartz, June 25 p 55
GE Accord: Has the Pattern Been Set? by C. J. Suchocki, Feb 5 p 49
GE-Honeywell Tie: Backlash for NC? by R. A. Wilson, May 28 p 87
GE Talks: A Lot of Smoke but No Fire, Jan 15 p 17
Going That Extra Mile as Manager, Mar 26 p 27
Happiness is a Happy Manager Who . . ., Apr 2 p 27
HUD Takes First Steps in Smashing Modular Home Bugs, by K. A. Kaufman, Mar 5 p 48
Labor '70: Color it Green and Angry, by C. J. Suchocki, Jan 1 p 72
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99
New Polyimide Molded as a Thermoset, Feb 26 p 74
One Wire Does the Work of Many, by A. M. Greene, Feb 19 p 104
Pulpits Pack Factory-Tested Punch, by A. M. Greene Mar 5 p 63
Retrofitting Seeks its Market Fit, by R. A. Wilson, Mar 26 p 60
What's Happening to Fuel Cells? by A. M. Greene, Mar 19 p 57
Who Will Rule the Ocean Floor? by S. M. Rivkin, Apr 16 p 57
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

General Iron Industries, Inc.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

General Motors Corp.:
Automen Race to Get Gas Turbines Going, by D. N. Williams, Apr 2 p 23
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71
GM Dubs New Roof 'Double Shell Top', by D. N. Williams, May 14 p 21
GM Flubs its Winning Reputation, May 21 p 63
GM Hedges on Strikes; Postpones Introductions, by D. N. Williams, May 7 p 21
GM Measures Scrap for Steel Coffin, by D. N. Williams, Mar 5 p 43
GM Spurns Detroit in New Plant Expansion, Mar 5 p 21
GM's Engines Emit Tool Sales? by D. N. Williams, Feb 26 p 51
GM's New Cupola Blows Continuous Melting Process, by R. A. Wilson, Apr 16 p 49
GM's Recon Steel Attracts the Mills, Apr 30 p 57
GM Stages Pollution Show-&-Tell Show, by D. N. Williams, Apr 23 p 23
GM's 60-Second Service Dash, by D. N. Williams, Jan 29 p 21
GM Suppliers SPEARed for Quality Control, by D. N. Williams, Jan 22 p 21
How Aluminum Engines are Made, by W. G. Patton, May 28 p 104
Is GM Trying to Wangle the Wankel? by D. N. Williams, June 11 p 21
'It's Time for General Motors', by D. N. Williams, June 4 p 61
Jobs Pile Up for Ductile Iron, by W. G. Patton, May 21 p 80
'Nasty Surprises' Stalk Steel's Year, by G. J. McManus, June 11 p 81
Price War Ahead for Pollution Kits? by D. N. Williams, Mar 19 p 19
Steel Summary: How Soon for GM's Coffin Steel? Mar 26 p 105
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55
UAW, GM Swap Charges as Secret Deal Sours, Jan 29 p 17
U. S. Mini Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55
U. S. Small Cars Race Heats Up, by D. N. Williams, June 4 p 21
Urethane: Up Front . . . and Counting, by D. N. Williams, Feb 19 p 21

Georgetown Steel Corp.:
Georgetown Grows Older . . . and Bolder, by G. J. McManus, Apr 16 p 54
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71

Georgia State University
Ban the Managerial Chameleons, May 14 p 25

Germany
Is GM Trying to Wangle the Wankel? by D. N. Williams, June 11 p 21

Giddings & Lewis Machine Tool Co.:
Machine Center Sets Speed Records, by B. D. Wakefield, Apr 2 p 80
Profits Lure Industry Overseas . . . by K. W. Bennett, May 28 p 88
Toolmen Play Both Sides of the Oceans, by R. A. Wilson, Mar 5 p 45

Gisholt Machine Co.:
New Lathe Closes Ranks in Automated Tool Line, by B. D. Wakefield, Feb 19 p 106

Golay & Co.:
Tank Industry: Lonely Bull Kicks Its Heels Up-High, by K. W. Bennett, June 11 p 83

Goodyear Rubber Co.:
Answers Sought as URW Walks at Goodyear, Apr 30 p 19

Government
Administration Plays Politics with Safety Bill, by K. A. Kaufman, Apr 23 p 21
Antitrust Chief Hails Success in Reciprocity Crackdown, by K. A. Kaufman, Feb 12 p 19
Budget Skirts Between Inflation and Recession, by K. A. Kaufman, Feb 5 p 50
Cabinet Members Eye Contractors' Winters of Discontent, by K. A. Kaufman, Jan 22 p 19
Can War on Smog Bring Antitrust Fog? by James Beizer, Mar 12 p 90
Clear Signs of a Pro-Business Drift, by K. A. Kaufman, Mar 12 p 85
Copper Producers Ready for U. S. Investigators, by James Beizer, Jan 29 p 73
Copper: What About Free Choice? by James Beizer and K. A. Kaufman, Mar 19 p 48
DOL Reviews UMW Election in Wake of Slayings, Jan 15 p 17
Federal Corporation Urges Foreign Investing, by K. A. Kaufman, Jan 22 p 46
Government Panel Drags Copper Price Issue into the Daylight, by James Beizer, Jan 22 p 77
Inland Second Steel Company Hit by Reciprocity Action, June 11 p 87
Interior Promises Help for Junked Car Processing, by K. A. Kaufman, Apr 9 p 19
It's the Game that Counts, Not the Plan, by Gene Beaudet, May 28 p 5
Meet Latest Pollutant—Politics, by K. A. Kaufman, Feb 19 p 79
Metalworking Gets Crack at Forming New SIC Categories, Mar 26 p 61
Mr. President, Let's Cut Down the Options, by Gene Beaudet, June 11 p 5
Nixon Panel to Probe Copper Prices . . . by James Beizer and K. A. Kaufman, Jan 15 p 54
Nixon Speech Draws Mixed Reviews, June 25 p 39
Nixon Urges Pension Plan Controls, Apr 2 p 62
"Priorities" Budget Can't Do it All, by K. A. Kaufman, Feb 19 p 87
Steel Prices: Return to Brinkmanship, by K. A. Kaufman and G. J. McManus, Jan 29 p 38
Sure Power Works, But to What End? by Gene Beaudet, Apr 2 p 5
Washington 1970: Year of Transition, by K. A. Kaufman, Jan 1 p 74
When Will the Government Let Go? by Gene Beaudet, Mar 5 p 5

Grant-Southern Iron & Metal Co.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Graphite
Graphite Tops Heat Exchanger Poll by Default, Apr 9 p 26

G. A. Gray Co.:
Nuclear Machining is for Elephants, June 25 p 58

Gray & Ductile Iron Founders Society
Pig Iron Rounds Out Price Hikes, by R. A. Wilson, Mar 12 p 87

Grinding
Diamonds Dig Into Stainless, Mar 5 p 66
How Safe is High-Speed Grinding? June 11 p 105
NC Rack Grinding Beats the Clock, Mar 26 p 80

Grumman Aerospace Corp.:
Lunar Wheels Look for Earth Jobs, Apr 16 p 26
What to Do for Worried Workers, Mar 5 p 25

Gulf Oil Corp.:
For Gulf (and Others), It's That Kind of Year, by G. J. McManus, May 7 p 65

H

Hadron, Inc.:
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Robert Half Personnel Agencies, Inc.:
Meet the "Kiss Me Kate" Syndrome, May 21 p 27

Hamilton Standard Div.:
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

Hammermills, Inc.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Hanna Furnace Corp.:
Pig Iron Rounds Out Price Hikes, by R. A. Wilson, Mar 12 p 87

Edward N. Hay & Associates:
The Corporate Dropout, Jan 1 p 81
Let's Have a Big Hand for Behaviorists, Jan 15 p 25

Hazelett Strip-Casting Corp.:
Aluminum Swings to Strip Castings, by G. J. McManus, Mar 26 p 73

Heat Exchangers
Graphite Tops Heat Exchanger Poll by Default, Apr 9 p 26
Small Tubing that Can Take the Heat, May 14 p 66

Heat Treating
Austempering Alters Brittle Failure, May 28 p 106
Small Tubing that Can Take the Heat, May 14 p 66

Heidrick and Struggles
Demand for Managers Dips—But Shouldn't, Feb 12 p 25

Hill Acme Co.:
Guidelines, Yes . . . Controls, No, May 28 p 81

Hitco Corp.:
Justice Dept. Auditions, "I Am Curious, Merger", Jan 15 p 58

Hobart Bros. Technical Center
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

Hoesch AG Huttenwerke
Foreign Steelmen Covet Computers, Apr 16 p 65

Honeywell, Inc.:
GE-Honeywell Tie: Backlash for NC? by R. A. Wilson, May 28 p 87
Maxi-Use for Mini-Computers, by T. H. Malim, Mar 12 p 101

Horsburgh & Scott
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

XUM

Houdaille Industries, Inc.:
Machine Tools in New Era of Chance, by J. E. Sandford, Jan 8 p 63

Housing
HUD Takes First Steps in Smashing Modular Home Bugs, by K. A. Kaufman, Mar 5 p 48
Metalworking Seeks a New Home, by G. J. McManus, Feb 5 p 43

Hughes Aircraft Co.:
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63

Hunter Engineering Co.:
Aluminum Swings to Strip Casting, by G. J. McManus, Mar 26 p 73

I

IIT Research Institute
Robots March Into Metalworking, by B. D. Wakefield, May 7 p 79
Squeeze Casting Has U. S. Friends, by B. D. Wakefield, May 28 p 97

Icon Corp.:
Low Costs Develop for NC Lathes, by T. H. Malim, May 21 p 86

Indiana Briquetting Corp.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Indiana Gas Co.:
Well, How About an Energy Day? by K. W. Bennett, May 14 p 47

Indiana Steel Supply Co.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Industrial Acoustics Co., Inc.:
Silence Broken on Noise Pollution, Apr 16 p 70

Industrial Briefs, Name Changes, Mergers, Acquisitions, Contracts

Industrial Psychology
The Corporate Dropout, Jan 1 p 81

Industrial Relations
Court Says Steel's Odd Couple Discriminates, by K. A. Kaufman, May 7 p 62
Dangle a Different Kind of Carrot, by S. M. Rivkin, Jan 22 p 52
Get Maximum Mileage from Recruiting, Jan 15 p 56
The Growing, Silent Minority, by Gene Beaudet, May 21 p 5
Hard Core Hires Need Fairy Godmother, Apr 16 p 25
Hard-core: 'The Man' Makes it Work, by I. G. Black, May 7 p 68
Hard Cores Bend Organization, Apr 16 p 25
Wage Plans: Smorgasbord, Anyone? by P. J. Cathey, Jan 15 p 56
What to Do for Worried Workers, Mar 5 p 25
Why is Everybody Leaving? by D. N. Williams, Feb 12 p 56

Industrial Services of America, Inc.:
Pollution Front: Still Marking Time, by K. W. Bennett, Jan 1 p 76

Information Systems
Commandments for Effective MIS, Mar 5 p 49
Computers: Here Comes Facility Man, by P. J. Cathey, Mar 5 p 49

Ingalls West
Ingalls West: Yard of the Future, by B. D. Wakefield and R. R. Irving, Feb 12 p 63

Ingersoll Milling Machine Co.:
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63

Ingersoll-Rand Co.:
Does Noise Control Need the Pill? by C. J. Suchocki, Apr 2 p 58

Ingots
Alumina Shapes Protect Steel Ingots, Apr 9 p 80

Inland Steel Co.:
The Corporate Dropout, Jan 1 p 81
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65
Inland Cans its Tinplate Line . . ., by K. W. Bennett, Mar 12 p 88
Inland Second Steel Company Hit by Reciprocity Action, June 11 p 87

Inquiries, Keyed Numbers for Reader Information Service

Inspiration Consolidated Copper Co.:
Can Washington Live with 60¢ Copper? by James Beizer, Apr 9 p 60

Institute of Gas Technology
Energy Scramble Leads to Coal Gas, by K. W. Bennett, Feb 12 p 51

Institute of Scrap Iron & Steel, Inc.:
Interior Promises Help for Junked Car Processing, by K. A. Kaufman, Apr 9 p 19
Scrap Industry Gears Up for the '70s, by H. R. Neal, Jan 29 p 46

Interferometers
Interferometer for Low-Budget Shops, Mar 26 p 81

International Brotherhood of Teamsters
Bank-Breaking Demands Posted by Teamsters, Jan 1 p 19
FASH Hit with Injunction; Teamsters Seek Damages, May 21 p 19
Steel Summary: Shipping Tie-Up Creates Havoc, Apr 30 p 103
Teamsters Dangle Carrot Before Steel Haulers, May 14 p 17
Teamsters Jack Up Wage Demands to 75 Pct, Jan 15 p 17
Teamsters Talks: All Eyes are on Chicago, Apr 2 p 19
Teamsters Walkout Threatens Shutdowns, Apr 23 p 90
Trucker Strike: No Panic in the Streets—Yet, May 14 p 54
Trucker Wildcats Give Steelmen Big Headache, Apr 16 p 50
Truckers Threaten Strikes Despite Tentative Accord, Apr 9 p 17

International Business Machines Corp.:
Are Manager Hunches More than Hunches? Mar 5 p 25
Every Manager's Dream: His Own Computer, Jan 8 p 25

International Computer Management
Computers: Here Comes Facility Man, by P. J. Cathey, Mar 5 p 49

International Iron and Steel Institute
'Nasty Surprises' Stalk Steel's Year, by G. J. McManus, June 11 p 81
Steelmen Argue Over Global View, by H. R. Neal and G. J. McManus, May 21 p 68

International Nickel Co.:
How to Succeed in Business—Overseas, June 18 p 27
Inco Rallies, but Nickel Still Must Sprint to Stay Even, by James Beizer, Mar 19 p 91
Nickel Plots a Course to 1.7 Billion lb Year by 1976, by James Beizer, Jan 1 p 171

International Relations
Ford Undecided Over Communist Truck Query, May 14 p 23
Steelmen Argue Over Global View, by H. R. Neal and G. J. McManus, May 21 p 68
World Trade and the Problems from Within, by Gene Beaudet, June 18 p 5

International Tin Council
Where, Oh Where Will Tin Prices Go? by James Beizer, Apr 23 p 92

International Union of Electrical Workers
RCA-IUE Talks Hit Snafu as Clock Runs Out, June 4 p 17

International—Weekly Reports (See Also Subject Classifications, Foreign Trade, Individual Countries)

Inventories
Beware Durables Orders Benchmark, by R. D. Shapiro, Jan 29 p 48

Iron
Jobs Pile Up for Ductile Iron, by W. G. Patton, May 21 p 80
Pig Iron Rounds Out Price Hikes, by R. A. Wilson, Mar 12 p 87

Iron Ore
Armco Tries to Shake Australian Iron Tree, by G. J. McManus, June 25 p 44
Ore Shipping: A Time to Consider All Seasons? by R. A. Wilson, Jan 22 p 48
Strikers Threaten to Mow Down Ore Shipments, June 11 p 17

J

Japan
An All Electroslag Welded Vessel? Feb 5 p 68
China Offers Glad Hand to Japanese Toolmen, June 18 p 25
Japanese Alloy Reduces Friction, Feb 19 p 26
Japanese Mill Increases Quality Output with ASEA-SKF Unit, June 4 p 26
Japanese Steel to Close on 100 Million Ton Level, Mar 19 p 21
Japanese Systems Cut Gas and Coke Problems, May 21 p 25
Japan's Top Steelmakers Plot Hefty Spending Hike, Apr 23 p 25
Nipponese See Ford Buys as Bid for Auto Move, June 4 p 23
Nippon Kokan Develops a Better Stainless Steel, June 11 p 26
One-Side Welding: It's Big in Japan, by Koichi Masubuchi, Feb 26 p 72
Steel in a World of Computers, by A. M. Greene, Feb 26 p 67
Suit Links Westinghouse, Japanese, by K. A. Kaufman, Apr 30 p 61
Sun Rises on Japan's Machine Tools, by I. G. Black, Apr 23 p 91
Textile Talks May Have Metalworking Twist, Mar 26 p 25
Toolmen Plumb Ventures in Japan, by R. A. Wilson, Mar 19 p 46
U. S. Steelmen of Two Minds on Nippon Merger, Apr 9 p 23
Wage Hike Pinch Felt by Japanese Steel, by G. J. McManus, Jan 29 p 44
World Market Battles for U. S. Scrap, by K. W. Bennett, Mar 5 p 47
Yankee Machine Tool Maker Sets Up First Far East Shop, by D. N. Williams, Jan 29 p 45

Japan Auto Parts Industries Assn.:
U. S. Mini Cars vs the Imports, by James Be zer and D. N. Williams, Apr 9 p 55

Jones & Laughlin Steel Corp.:
Ailing J&L Gets Well in Court, by G. J. McManus, June 18 p 54
Conglomerates in Steel: Good Grief? by G. J. McManus, Apr 23 p 84
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65
What's Happening to LTV? Feb 26 p 58

David J. Joseph Co.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Joslyn Stainless Steels
New Technology Triggers Stainless Steel Price Cuts, by G. J. McManus, Apr 23 p 86

Juran, J. M.:
Can Quality Control be Defect Free, by G. J. McManus, June 18 p 59

K

Kaiser Aluminum & Chemical Corp.:
Blenders Give Better Business Batter, June 11 p 25
Royal Dutch Shell Bets Oil and Metals Mix, by James Beizer, June 4 p 103
Strong Aluminum Alloy Checks Stress Corrosion, Feb 5 p 28

Kankakee Electric Steel Co.:
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71

Kawasaki Steel Corp.:
Japanese Mill Increases Quality Output with ASEA-SKF Unit, June 4 p 26

Kearney & Trecker Corp.:
Machine Tool Controls: Whose Business Is It? by R. A. Wilson, Feb 12 p 45
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63
The Shaking of a Precedent? by R. A. Wilson, May 21 p 61

Keller & Knappich GmbH
Friction Welding Gets a Smooth Ride, Mar 26 p 28

Kennecott Copper Corp.:
Did the Good Dr. H. Lay an Egg? by James Beizer and K. A. Kaufman, May 14 p 50

Kentucky Electric Steel Co.:
Mini-Mills Choke on Scrap Prices, by G. J. McManus, Jan 22 p 44
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71

Kingsbury Machine Tool Co.:
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63

Koppers Co.:
What's 50 Million Folks Among Friends? May 28 p 83

L

Labor
AFL-CIO Pushes for Import Quota Recipe, by K. A. Kaufman, May 28 p 19

Ailing J&L Gets Well in Court, by G. J. McManus, June 18 p 54
ALA Takes its First Lump Election Vote, Feb 5 p 19
Answers Sought as URW Walks at Goodyear, Apr 30 p 19
Auto Talks: New Name, Same Game? May 28 p 17
Bank-Breaking Demands Posted by Teamsters, Jan 1 p 19
Building Trades Asked to Drop Veto Power, Jan 29 p 17
Building Trades Move to Speed-Up Work Disputes, Apr 16 p 17
Clear Sign of a Pro-Business Drift, by K. A. Kaufman, Mar 12 p 85
Construction: Everyone Makes His Own Deal! May 19 p 15
Court Backs NLRB on Slow Rulings, Jan 1 p 19
Court Review Signals Hard Times for Labor, Apr 9 p 17
Court Ruling Clears Way for Strike Curbs, by K. A. Kaufman, June 11 p 19
DOL Adopts New Rules on Pay Garnishment, June 4 p 17
DOL Reviews UMW Election in Wake of Slayings, Jan 15 p 17
DOL Sues UMW Rerun, Mar 12 p 17
DOL Taps Prisons for New Manpower Supply, Feb 19 p 17
FASH Hit with Injunction: Teamsters Seek Damages, May 21 p 19
GE Accord: Has the Pattern Been Set? by C. J. Suchocki, Feb 5 p 49
GE Talks: A Lot of Smoke but No Fire, Jan 15 p 17
Get Maximum Mileage from Recruiting, Jan 15 p 56
Grievance Filing Time Grows Shorter, May 7 p 17
The Growing, Silent Minority, by Gene Beaudet, May 21 p 5
Hands-Off Bargaining? Meany Never Heard of It, Mar 15 p 17
How High Will UAW Wage Increases Climb in '70? by D. N. Williams, Apr 30 p 56
Incentive Hassle Threatens Steel Slowdown, Mar 12 p 17
Is the Postal Strike Really Over? by Gene Beaudet, Apr 9 p 5
'It's Time for General Motors', by D. N. Williams, June 4 p 61
Job Market Tight as Recruiting Slips, by S. M. Rivkin, Mar 19 p 51
Labor '70: Color it Green and Angry, by C. J. Suchocki, Jan 1 p 72
Labor Unrest Spreads from U. S. to Europe, Jan 15 p 23
Layoffs Point to Black Days Ahead, by K. W. Bennett, Jan 15 p 51
Mail Carriers Walk—For Higher Pay, Mar 26 p 19
Mails Roll Again as Leaders Seek Answers, Apr 2 p 19
Meany Calls Philly Plan Political Scapegoat, Jan 22 p 17
Meany Stumps for Wage, Price Controls—Again, Feb 26 p 19
NAB Hangs On Despite Job Slump, by K. W. Bennett, Feb 19 p 82
NLRB: Labor Pacts are Part of Acquisitions, May 21 p 19
New DOL Head Faces Tough Tests, June 18 p 19
The New Migrants—Technicians, Mar 12 p 25
RCA-IUE Talks Hit Snafu as Clock Runs Out, June 4 p 17
Rubber Industry Prepares to Bounce into New Talks, by R. A. Wilson, Apr 2 p 59
Rubber Talks: Escalator May be the Key, Apr 23 p 19
Steel Gets a Philly Plan of its Own, Feb 12 p 17
Steel Summary: Explosive Strike Pressures Grow, May 21 p 109
Steel Summary: Labor Hoists the Warning Flag, Apr 16 p 89
Steel Summary: Shipping Tie-Up Creates Havoc, Apr 30 p 103
Steel Summary: Strike Effects to Last for Weeks, Apr 23 p 147
Steel Summary: Truck Strike Has Producers Edgy, May 7 p 105
Steelworkers Press for Incentive Pay, June 11 p 17
Strikers Threaten to Mow Down Ore Shipments, June 11 p 17
Teamster Talks: All Eyes are on Chicago, Apr 2 p 19
Teamsters Dangle Carrot Before Steel Haulers, May 14 p 17
Teamsters Jack Up Wage Demands to 75 Pct, Jan 5 p 17
Teamsters Walkout Threatens Shutdowns, Apr 23 p 90
Technical Manpower Pool Needs Filling, Jan 8 p 17
Truck Strikes Disrupt Level Market, Apr 23 p 152
Trucker Strike: No Panic in the Streets—Yet, May 14 p 54
Trucker Wildcats Give Steelmen Big Headache, Apr 16 p 50
Truckers Threaten Strikes Despite Tentative Accord, Apr 9 p 17
UAW, GM Swap Charges as Secret Auto Deal Sours, Jan 29 p 17
UAW Talks: Keep an Eye on Automation Issue, Mar 19 p 15
UAW Targets C-O-L in Coming Auto Bargaining, Feb 12 p 17
UMW Decides to Take a Look on its Own, Mar 5 p 17
USWA Charges U. S. Steel in Incentive Backdown, by G. J. McManus, Feb 26 p 57
Unions Chip Away at Management Rights, June 25 p 19
Wage Gains Only Go One Way—Up, May 14 p 17
Wage Plans: Smorgasbord, Anyone? by P. J. Cathey, Jan 15 p 56
Wage Reopeners for UAW? Not Likely, Mar 26 p 19
Who's Going to Harness Builders? by G. J. McManus, Mar 26 p 64
Will Arbitration Replace the Strike? Apr 23 p 19
Yablonski Slayings Leave Coal Fields, UMW Uneasy, Jan 22 p 17

Laclede Steel Co.:
Scrap Exports: Lacede Seeks Help for a 'Gored Ox', June 4 p 59
Scrap Industry Bucks Laclede Drive to Curb Scrap Exports, by K. A. Kaufman, June 25, p 43

Laser Systems Corp.:
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Lasers
Interferometer for Low-Budget Shops, Mar 26 p 81
Laser Brightens Hydraulics Outlook, June 25 p 28
Lasers: More Than Just a Light Bulb, Jan 8 p 26
Microcracking Eliminated in Laser Drilling, Apr 2 p 28
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Lathes
Lathes Take New Turn at SME Tool Show, Apr 23 p 28
Low Costs Develop for NC Lathes, by T. H. Malim, May 21 p 86
New Lathe Closes Ranks in Automated Tool Line, by B. D. Wakefield, Feb 19 p 106
One Good Turn on Vertical Lathe Worth Two on Another, by R. A. Wilson, Feb 26 p 76
Transfer Line Turns for the Better, May 7 p 82
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

Lead
Lead and Zinc: Competition Stiffens, by James Beizer, Feb 19 p 91
Lead and Zinc Men Discuss Marketing Future, June 11 p 85
Lead: "Scapegoat in the Auto Emission Hassle", by James Beizer, Apr 16 p 91

Lead Industries Assn.:
Lead: "Scapegoat for the Auto Emission Hassle", by James Beizer, Apr 16 p 91

Lear Siegler, Inc.:
Systems That Keep Automakers on Top, by W. G. Patton, Jan 22 p 55

LeBlond Machine Tool Co.:
Low Costs Develop for NC Lathes, by T. H. Malim, May 21 p 86

Leesona Moos Laboratories
Zinc-Air Battery Has What It Takes to Make Car Go, May 21 p 87

Legislation
Administration Plays Politics with Safety Bill, by K. A. Kaufman, Apr 23 p 21
Approved Safety Bill Heads for Stormy House Fight, by K. A. Kaufman, June 25 p 21
Boom! Here Comes the Noise Rules Explosion, by K. A. Kaufman, Apr 16 p 19
Consumer Backers Press for Warranty Bill Passage, by K. A. Kaufman, Feb 5 p 21
Court Ruling Clears Way for Strike Curbs, by K. A. Kaufman, June 11 p 19
Defense Accounting Bill Faces Senate Block, by K. A. Kaufman, June 4 p 19
Defense Accounting Rules Get Green Light, May 21 p 21
Don't Put U. S. in the Scrap Business, Senate Group Urged, by K. A. Kaufman, Mar 12 p 19
It May Be Tougher Keeping Takeover Deals Quiet, by K. A. Kaufman, Feb 19 p 19
Machine Builders 10-Point Trade Program, June 11 p 86
Mergers: Congress Urged to Postpone Crackdown, by K. A. Kaufman, Feb 26 p 58
Nixon Urges Pension Plan Controls, Apr 2 p 62
Revenue Reform Act Loaded Against Capital Growth? by K. A. Kaufman, Apr 30 p 21
Senate Commerce Panel Okays Guaranty Measure, by K. A. Kaufman, May 14 p 19
Senator, This Way to the Rolling Mill, by K. A. Kaufman, Jan 22 p 41
Senators Set to Tour a 'Deadly, Horrible' Plant, by K. A. Kaufman, Apr 9 p 57
Steel Backs Off From Quota Demands, by K. A. Kaufman, Apr 23 p 88
Steel Boom Weakens Quota Cries, by K. A. Kaufman, June 11 p 86

Lehigh University
Computers Getting More Friendly, Jan 8 p 25

Letter to the Editor, Information Feedback from Readers

Lincoln Electric Co.:
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

Lincoln Welding School
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

Ling-Temco-Vought, Inc.:
Conglomerates in Steel: Good Grief? by G. J. McManus, Apr 23 p 84
What's Happening to LTV? Feb 26 p 58

Arthur D. Little, Inc.:
Lasers: More Than Just a Light Bulb, Jan 8 p 26
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Litton Industries:
Ingalls West: Yard of the Future, by B. D. Wakefield and R. R. Irving, Feb 12 p 63

Lockheed-California Co.:
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63

Lodge & Shipley Co.:
Low Costs Develop for NC Lathes, by T. H. Malim, May 21 p 86

Logemann Bros.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Lord Manufacturing Co.:
Does Noise Control Need the Pill? by C. J. Suchocki, Apr 2 p 58

Lubricants
Curing Die Lubrication Complaints, Feb 26 p 75
New Cold-Draw Lube Gets Mixed Reviews, by D. N. Williams, May 14 p 52

Luria Steel Trading Corp.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Lykes-Youngstown Corp.:
Conglomerates in Steel: Good Grief? by G. J. McManus, Apr 23 p 84
Steelmen Dust Off New Plant Plans, by G. J. McManus, Apr 9 p 61

Mc

McLouth Steel Corp.:
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65

M

Machine Tools
. . . As Foreign Producers Eye U. S., by W. J. Kalb, May 28 p 89
China Offers Glad Hand to Japanese Toolmen, June 18 p 25
Computers Show Tools the Way, June 4 p 78
Federal Tools Get 5-Year Phase-Out, by K. A. Kaufman, May 4 p 53
GM's Engines Emit Tool Sales? by D. N. Williams, Feb 26 p 51
Machine Builders 10-Point Trade Program, June 11 p 86
Machine Tool Controls: Whose Business Is It? by R. A. Wilson, Feb 12 p 45
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63
Machine Tools: No Surprises in 1970, by R. A. Wilson, Jan 29 p 41
Machine Tools Take February Nosedive, by R. A. Wilson, Apr 2 p 60
Machining Center Sets Speed Records, by B. D. Wakefield, Apr 2 p 80
NC Patterns for Castings: 'Nothing Earthshaking'? by D. N. Williams, Mar 26 p 63
On the Way to Detroit's SME Show . . . by D. N. Williams, Apr 16 p 53
Retrofitting Seeks its Market Fit, by R. A. Wilson, Mar 26 p 60
The Shaking of a President? by R. A. Wilson, May 21 p 61
Sun Rises on Japan's Machine Tools, by I. G. Black, Apr 23 p 91
Toolmen Play Both Sides of the Oceans, by R. A. Wilson, Mar 5 p 45
Toolmen Plumb Ventures in Japan, by R. A. Wilson, Mar 19 p 46
Transfer Line Turns for the Better, May 7 p 82
Watch the Robot Plug Himself In, by K. W. Bennett and D. N. Williams, Apr 16 p 47
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61
Why Computers Fail . . . Or Succeed, by J. E. Sandford, Apr 30 p 63

XUM

Yankee Machine Tool Maker Sets Up First Far East Shop, by D. N. Williams, Jan 29 p 45

Machinery and Allied Products Institute

Not Even Casey Could Explain This, by Gene Beaudet, Apr 16 p 5

Machining

Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71
Machining Center Sets Speed Records, by B. D. Wakefield, Apr 2 p 80
Nuclear Machining is for Elephants, June 25 p 58
Soviets Prevent Chips From Falling, May 28 p 100

Mack Trucks, Inc.:

Shafts Fatigue Less After Salt Bath, Mar 19 p 66

MacLean-Fogg Lock Nut Co.:

Nuts in Coils Speed Production, May 21 p 88

Management

And Now—Introducing the Principle, Feb 19 p 25
Are Manager Hunches More than Hunches? Mar 5 p 25
Are You a Decider or Multiplier Manager? Mar 26 p 27
Ban the Managerial Chameleons, May 14 p 25
Blenders Give Better Business Batter, June 11 p 25
Business and the '70's, 2—The Problems From Within, by Gene Beaudet, Jan 8 p 5
Business and the '70's, 3—Will Malaise Settle Over U. S. Industry? by Gene Beaudet, Jan 15 p 5
The Corporate Dropout, Jan 1 p 81
Curing Chronic Meeting-itis, June 11 p 25
Dangle a Different Kind of Carrot, by S. M. Rivkin, Jan 22 p 52
Demand for Managers Dips—But Shouldn't, Feb 12 p 25
Do the Guy a Favor: Fire Him, by D. N. Williams, Feb 5 p 55
Don't Give Up on Alcoholic Employee, Mar 12 p 25
Every Manager's Dream: His Own Computer, Jan 8 p 25
Exec Job Market? Depends on What You Do, May 28 p 25
Fast Exit Coming for the Crisis-Eater? June 18 p 27
Going That Extra Mile as Manager, Mar 26 p 27
Happiness is a Happy Manager Who . . ., Apr 2 p 27
Hard Core Hires Need Fairy Godmother, Apr 16 p 25
Help! We're Doing Four Days in Five, Feb 5 p 27
How One Company is Doing It, Jan 29 p 25
How to Succeed in Business—Overseas, June 18 p 27
If Columbus Tried to Sail Today—Goodbye! Mar 19 p 28
"Involved Managers Welcome Change", by P. J. Cathey, Feb 26 p 62
Just How Good are Outside Recruiters? Apr 23 p 27
Let's Have a Big Hand for Behaviorists, Jan 15 p 25
Look at Managing in the Year 2000, Jan 1 p 27
Making Sure the Real Message Gets Across, June 4 p 25
Managers Need Anti-Migraine Warranty, Apr 30 p 27
Meet the "Kiss Me Kate" Syndrome, May 21 p 27
"Mirror, Mirror on the Wall . . ., June 25 p 27
More Claw Marks on the Way to the Top, Feb 26 p 27
New Approach: Think Small in a Big Way, Jan 22 p 25
Personality Wars: Causes, Symptoms, Cures, May 21 p 27
Profit Hunter Bags His Quota—Plus, by K. W. Bennett, Apr 2 p 65
Proxy Pressure to Pressure Managers, May 14 p 25
Put Human Resources on the P&L Sheet, Jan 29 p 25
R & D: Keep a Stopwatch Running, by P. J. Cathey, Mar 26 p 67
Recession Jitters? Here's a Survival Kit, Apr 9 p 25
Right Paperwork Boosts Output, May 14 p 57
. . . Seeks Mental Change of Venue, Apr 2 p 27
Switch Line, Staff Jobs to Build Better Managers, by P. J. Cathey, May 28 p 91
Talk Show is Communications Hit, by K. W. Bennett, Jan 8 p 59
Technology May Take Back Seat, Jan 1 p 27
Twenty Pages Deep-and Snowing, Feb 5 p 27
Unions Chip Away at Management Rights, June 25 p 19
The Vest-Breasted Job Hopper Paradox, Apr 23 p 27
Welcome Mat for the Veterans? Apr 9 p 25
What Makes Delegating Difficult? May 7 p 25
. . . Who is Fairest of Them All"? June 25 p 27
Why is Everybody Leaving? by D. N. Williams, Feb 12 p 56
You've Got to Have Style, Miles of Style, May 7 p 25

Manchester Tank & Equipment Co.:

Tank Industry: Lonely Bull Kicks its Heels Up-High, by K. W. Bennett, June 11 p 83

Manco Mfg. Co.:

Steel Ribbon Calls Line Signals, Apr 2 p 79

Manufacturing

Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55

Market Digest, Weekly Page of Marketing

Marketing

Lead and Zinc Men Discuss Marketing Future, June 11 p 85
Selling Metals Was Never Like This, by K. W. Bennett, May 7 p 57
Steel Summary: Order Slide Appears Checked, Feb 5 p 81

Marketing Motivation Associates, Inc.:

Here's an All-purpose Economic Report, June 4 p 25

Massey Ferguson, Inc.:

If They're Nervous, it Doesn't Show, by K. W. Bennett, Feb 5 p 46

Materials

Aerospace Faces a Tough Decade, by N. B. Schwartz and R. R. Irving, June 11 p 99

Materials Handling

Foreign Builders Move In on Materials Handling, by R. A. Wilson, May 21 p 66
Will Positive Thinking Really Work? by G. J. McManus, June 18 p 57

Materials Handling Institute

Foreign Builders Move In on Materials Handling, by R. A. Wilson, May 21 p 66
Will Positive Thinking Really Work, by G. J. McManus, June 18 p 57

Meetings and Conventions

Aerospace Gets Set for a Shot-in-the-Arm, May 28 p 26
The AWS Welding Show Better Late than Never, June 18 p 28
The Design Show: A Market for Consumables, May 21 p 28
Foreign Builders Move In on Materials Handling, by R. A. Wilson, May 21 p 66
1970 Design Shows Unwraps 1969 R & D Efforts, Apr 30 p 78
1970 Meetings and Conventions, Jan 1 p 132
On the Way to Detroit's SME Show, by D. N. Williams, Apr 16 p 53

Meetings and Exhibits—Dates, Locations and Sponsors for Upcoming Conferences, Meetings and Shows

Mercedes-Benz of North America, Inc.:

U. S. Mini Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55

Mergers

Antitrust Chief Hails Success in Reciprocity Crackdown, by K. A. Kaufman, Feb 12 p 19
Can War on Smog Bring Antitrust Fog? by James Beizer, Mar 12 p 90
Conglomerates in Steel: Good Grief? by G. J. McManus, Apr 23 p 84
Cyclops Eyes Detroit Steel, by D. N. Williams, Apr 2 p 57
Justice Dept. Auditions "I Am Curious, Merger", Jan 15 p 58
Mergers: Congress Urged to Postpone Crackdown, by K. A. Kaufman, Feb 26 p 58
Suit Links Westinghouse, Japanese, by K. A. Kaufman, Apr 30 p 61
U. S. Steelmen of Two Minds on Nippon Merger, Apr 9 p 23
What's Happening to LTV? Feb 26 p 58

Metal Coatings

Alloy Temperature Limits Boosted by Coating Process, Feb 26 p 73

Metal Presses

Press Builders Take Systems Path, by B. D. Wakefield, Mar 5 p 57

Metallurgy

Alloy Temperature Limits Boosted by Coating Process, Feb 26 p 73
Alloys Get a New Buildup, by T. H. Malim, Mar 26 p 79
Alumina Shapes Protect Steel Ingots, Apr 9 p 80
Are Two Metals Better Than One? by A. M. Greene and R. R. Irving, Apr 30 p 68
Austempering Alters Brittle Failure, May 28 p 106
Explosive Bonding Packs Strength Into Metal Composites, Jan 29 p 60
Gas Seeks Out Powder Metal Flaws, by T. H. Malim, June 25 p 59
Low-Sulfur Steel Makes a Profit, Apr 16 p 68
Small Tubing that Can Take the Heat, May 14 p 66
Stainless: Is the Stage Set for 200 Series? Feb 19 p 97
Tungsten Dopes Metals to New Heights, Mar 19 p 24
What Price Stainless Steel? June 25 p 60

Metalworking Industry

Beware Durables Orders Benchmark, by R. D. Shapiro, Jan 29 p 48
Consumerism Eyes Design, Materials, by C. J. Suchocki, Jan 22 p 49
Growth Slowdown Seen for Primary Metals in '70, by K. A. Kaufman, Jan 8 p 19
Job Shops Cut by Turndown's Edge, by K. W. Bennett, Mar 19 p 41
Metalworking Gets Crack at Forming New SIC Categories, Mar 26 p 61
Metalworking Seeks a New Home, by G. J. McManus Feb 5 p 43
Nixon Speech Draws Mixed Reviews, June 25 p 39
Profits Lure Industry Overseas . . . by K. W. Bennett, May 28 p 88
Robots March Into Metalworking, by B. D. Wakefield, May 7 p 79
Selling Metals Was Never Like This, by K. W. Bennett, May 7 p 57
Steel Ribbon Calls Line Signals, Apr 2 p 79

Metalworking Labor—Weekly Report of Industrial Relations, Wages, Union Activities

Metalworking Newsfront—Weekly Comment on Industry Problems

Metcut Research Associates

Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

Michigan State University

The Corporate Dropout, Jan 1 p 81
Every Manager's Dream: His Own Computer, Jan 8 p 25
Job Marketing Tight as Recruiting Slips, by S. M. Rivkin, Mar 19 p 51
Will Arbitration Replace the Strike? Apr 23 p 19

Midland-Ross Corp.:

Direct Reduction Draws a Crowd, by G. J. McManus, Feb 19 p 84
Furnaces Belt Out Better Bolts, May 14 p 70
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71

Midvale-Heppenstall Co.:

Alumina Shapes Protects Steel Ingots, Apr 9 p 80

Minerals

Mining's Public Land Prospects Soar, by James Beizer and K. A. Kaufman, June 25 p 49
U. S. Heads for the Mineral Poorhouse, by B. D. Wakefield, June 4 p 71

Mining Industry

Coal: Dusting Off a Sooty Image, by G. J. McManus, Jan 8 p 47
Court Review Signals Hard Times for Labor, Apr 9 p 17
Mining's Public Land Prospects Soar, by James Beizer and K. A. Kaufman, June 25 p 49
Somebody Has to Pay . . . But Who? by G. J. McManus and K. A. Kaufman, Apr 9 p 58

Minster Machine Co.:

Press Builders Take Systems Path, by B. D. Wakefield, Mar 5 p 57

Mitsubishi Heavy Industries, Ltd.:

An All Electroslag Welded Vessel? Feb 5 p 68
Suit Links Westinghouse, Japanese, by K. A. Kaufman, Apr 30 p 61

Mitsubishi Metal Mining Co., Ltd.:

Japanese Alloy Reduces Friction Feb 19 p 26

J. H. Montgomery Co.:

New Cold-Draw Lube Gets Mixed Reviews, by D. N. Williams, May 14 p 52

XUM

Motch & Merryweather Machinery Co.:
The Shaking of a Precedent? by R. A. Wilson, May 21 p 61

Motorola Executive Institute
The Corporate Dropout, Jan 1 p 81

N

National Alliance of Businessmen
NAB Hangs On Despite Job Slump, by K. W. Bennett, Feb 19 p 82

National Ash Assn.:
Pollution: Undigested Technology, by K. W. Bennett, Mar 26 p 57

National Assn. of Aluminum Distributors
How Aluminum Dodged a First Quarter Downturn, by James Beizer, Apr 2 p 117

National Assn. of Purchasing Management
Purchasing Agents Have Their Day at Nonferrous Forum, by James Beizer, May 28 p 163
'60s Sizzle Fizzles, '70s Simmer, by S. M. Rivkin, May 28 p 83

National Automatic Merchandisers Assn.:
Growth Shortchanges Vending Makers, by I. G. Black, Mar 26 p 62

National Industrial Conference Board
Don't Give Up on Alcoholic Employee, Mar 12 p 25
Hard Core Hires Need Fairy Godmother, Apr 16 p 25
Hard Cores Bend Organization, Apr 16 p 25
Job Market Tight as Recruiting Slips, by S. M. Rivkin, Mar 19 p 51
Mr. Consumer, It's Your Move Now, by J. B. Baxter, May 14 p 55
Now that the Slowdown 's Here . . ., by J. D. Baxter, Mar 5 p 44

National Labor Realtions Board
Clear Signs of a Pro-Business Drift, by K. A. Kaufman, Mar 12 p 85
Court Backs NLRB on Slow Rulings, Jan 1 p 19
NLRB: Labor Pacts are Part of Acquisitions, May 21 p 19

National Machine Tool Builders Assn.:
Machine Builders 10-Point Trade Program, June 11 p 86
Machine Tools Take February Nosedive, by R. A. Wilson, Apr 2 p 60

National Screw and Manufacturing Co.:
Furnaces Belt Out Better Bolts, May 14 p 70

National Steel Corp.:
AISI: Profits, Prices and Fat Pacts, by G. J. McManus, June 4 p 57
Another Bill Won't Solve Water Pollution Problem, by K. A. Kaufman, June 18 p 21
Strikes, Market Muddle Steel Prices Into Trouble, by G. J. McManus, May 28 p 86

National Tool, Die and Precision Machining Assn.:
Federal Tools Get 5-Year Phase-Out, by K. A. Kaufman, May 14 p 53
Tool & Die: Things are Good, But—by D. N. Williams, Feb 12 p 48

National Transportation Safety Board
Tank Car Safety Blows Sky High, by S. H. Hockenberry, Feb 12 p 50

Natural Gas
Energy Scramble Leads to Coal Gas, by K. W. Bennett, Feb 12 p 51
Liquid Natural Gas Begins to Look Better, Apr 9 p 58

Neptune Meter Co.:
Right Paperwork Boosts Output, May 14 p 57

New Equipment—Weekly Array of Latest Models and Accessories

Newark College of Engineering
Are Manager Hunches More than Hunches? Mar 5 p 25

New York Telephone Co.:
The Corporate Dropout, Jan 1 p 81

Nickel
Inco Rallies, but Nickel Still Must Sprint to Stay Even, by James Beizer, Mar 19 p 91
Nickel Plots a Course to 1.7 Billion lb. Year by 1976, by James Beizer, Jan 1 p 171

Nippon Kokan
Nippon Kokan Develops a Better Stainless Steel, June 11 p 26

Nippon Steel Corp.:
Foreign Steelmen Covet Computers, Apr 16 p 65
Japanese Systems Cut Gas and Coke Problems, May 21 p 25
Japan's Top Steelmakers Plot Hefty Spending Hike, Apr 23 p 25
U. S. Steelmen of Two Minds on Nippon Merger, Apr 9 p 23

Noise
Boom! Here Comes the Noise Rules Explosion, by K. A. Kaufman, Apr 16 p 19
Does Noise Control Need the Pill? by C. J. Suchocki, Apr 2 p 58
Silence Broken on Noise Pollution, Apr 16 p 70

Nondestructive Testing
Gas Seeks Out Powder Metal Flaws, by T. H. Malim, June 25 p 59
Nondestructive Testing: Emphasis on Operators, Jan 29 p 62

Nonferrous Industry
A Copper Calm? Well, There's Usually Something to . . ., by James Beizer, Mar 5 p 81

Nonferrous Markets—Weekly Reports Including Prices (See Also James Beizer)

Nonferrous Metals
. . . After Brass Mills Post Higher Charges, by James Beizer, Jan 15 p 55
Brass Mill Prices Start to Roll Down, by James Beizer, June 25 p 89
Can Washington Live with 60¢ Copper? by James Beizer, Apr 9 p 60
Copper: What About Free Choice? by James Beizer and K. A. Kaufman, Mar 19 p 48
Finland Puts Emphasis on Metals, by H. R. Neal, Apr 30 p 58
For American Can, a Substantially Reduced Base, by James Beizer, Feb 26 p 93
Lead and Zinc: Competition Stiffens, by James Beizer, Feb 19 p 91
Lead and Zinc Men Discuss Marketing Future, June 11 p 85
Nearly Everybody is a Winner, by James Beizer, Feb 19 p 81
Nixon Panel to Probe Copper Prices, by James Beizer and K. A. Kaufman, Jan 15 p 55
Nonferrous Profits So Good, They're Embarrassing, by James Beizer, May 14 p 95
Purchasing Agents Have Their Day at Nonferrous Forum, by James Beizer, May 28 p 163
Royal Dutch Shell Bets Oil and Metals Mix, by James Beizer, June 4 p 103
Where, Oh Where Will Tin Prices Go? by James Beizer, Apr 23 p 92

David North & Associates, Inc.:
"Mirror, Mirror on the Wall . . ., June 25 p 27

North American Rockwell Corp.:
Forget the Cycle—Full Speed Ahead, by G. J. McManus, June 11 p 93
Space is for Exploring, by G. J. McManus, Mar 19 p 47

North Star Steel Co.:
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71

Northwestern Steel and Wire Co.:
. . . But Mills Mull More than Money, by G. J. McManus, Mar 12 p 89

Northwestern University
Job Market Tight as Recruiting Slips, by S. M. Rivkin, Mar 19 p 51

Norton Co.:
Refractories Start Where Metals End, Feb 5 p 62

Nuclear Power
Electric Power Pros Cut Nuclear Spending, by K. W. Bennett, Apr 30 p 60
Field Fabrication's the Answer for Giant Nuclear Vessels, by B. D. Wakefield, Apr 30 p 76
Nuclear Machining is for Elephants, June 25 p 58
Well, How About an Energy Day? by K. W. Bennett, May 14 p 47

Nuclear Reactors
Field Fabrication's the Answer for Giant Nuclear Vessels, by B. D. Wakefield, Apr 30 p 76

Numerical Control
Computers Crimp Riveting Problems, Apr 30 p 72
Computers Show Tools the Way, June 4 p 78
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71
Foreign Steelmen Covet Computers, Apr 16 p 65
GE-Honeywell Tie: Backlash for NC? by R. A. Wilson, May 28 p 87
Low Costs Develop for NC Lathes, by T. H. Malim, May 21 p 86
Machine Tool Controls: Whose Business Is It? by R. A. Wilson, Feb 12 p 45
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63
Machining Center Sets Speed Records, by B. D. Wakefield, Apr 2 p 80
Maxi-Use for Mini-Computers, by T. H. Malim, Mar 12 p 101
Mini-Computers Make Big NC Waves, by J. E. Sanford, Feb 19 p 102
NC Patterns for Castings: 'Nothing Earthshaking'? by D. N. Williams, Mar 26 p 63
NC Rack Grinding Beats the Clock, Mar 26 p 80
New Unit Joins Race to Age NC Controls, by R. A. Wilson, June 4 p 60
One Wire Does the Work of Many, by A. M. Greene, Feb 19 p 104
The Progress of Process Computers, Jan 29 p 55
Retrofitting Seeks Its Market Fit, by R. A. Wilson, Mar 26 p 60
Steel in a World of Computers, by A. M. Greene, Feb 26 p 67
Sun Rises on Japan's Machine Tools, by I. G. Black, Apr 23 p 91
Systems That Keep Automakers on Top, by W. G. Patton, Jan 22 p 55
Watch the Robot Plug Himself In, by K. W. Bennett and D. N. Williams, Apr 16 p 47
Why Computers Fail . . . Or Succeed, by J. E. Sandford, Apr 30 p 63
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

O

Olin Mathieson Chemical Corp.:
Stampers Eye Copper Substitutes, by B. D. Wakefield, Apr 30 p 74

Omark Industries
Computers Crimp Riveting Problems, Apr 30 p 72

Oravisual Co.:
Curing Chronic Meeting-itis, June 11 p 25

Overseas Private Investment Corp.:
Federal Corporation Urges Foreign Investing, by K. A. Kaufman, Jan 22 p 46

Owens-Corning Fiberglas Corp.:
Glass Composites Get "Deep-Six", Jan 29 p 26
Steel's Salvation in a Shrinking Market . . ., by R. A. Wilson, Jan 15 p 58

Oxford Pendaflex Corp.:
Help! We're Doing Four Days Work in Five, Feb 5 p 27
Twenty Pages Deep—and Snowing, Feb 5 p 27

P

Parsons, John
NC Patterns for Castings: 'Nothing Earthshaking'? by D. N. Williams, Mar 26 p 63

Pellets
Direct Reduction Draws a Crowd, by G. J. McManus, Feb 19 p 84

Pennsylvania State University
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71

People's Gas, Light & Coke Co.:
Well, How About an Energy Day?, by K. W. Bennett, May 14 p 47

Petroleum Industry
For Gulf (and Others), It's That Kind of Year, by G. J. McManus, May 7 p 65

XUM

Royal Dutch Shell Bets Oil and Metals Mix, by James Beizer, June 4 p 103

Phelps Dodge Corp.:
Can Washington Live with 60¢ Copper? by James Beizer, Apr 9 p 60
Surprise! Copper Prices are Up Again, by James Beizer, Jan 8 p 87

Phoenix Steel Corp.:
Can Phoenix Rise from the Ashes? by C. J. Suchocki, Jan 8 p 54

Pielet Bros.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Pig Iron
Pig Iron Rounds Out Price Hikes, by R. A. Wilson, Mar 12 p 87

Plastics
Metal Stamping Suits Plastic, Apr 9 p 77
New Polyimide Molded as a Thermoset, Feb 26 p 74
Plastic Behaves Like a Metal, Mar 12 p 110
Plastic, Plastic, Who's Got the Plastic? Mar 12 p 26
Plastics Have Alloys, Too, by H. R. Clauser, May 7 p 75
Steel's Salvation in a Shrinking Market . . ., by R. A. Wilson, Jan 15 p 58
Urethane: Up Front . . . and Counting, by D. N. Williams, Feb 19 p 21

Pollak Steel Co.:
Mini-Mills Choke on Scrap Prices, by G. J. McManus, Jan 22 p 44

Pollution, Air
Ah, Wilderness! Boo! Throw Him Out! by Gene Beaudet, Mar 12 p 5
Air-Bag a 'Must' on '72 Cars, by D. N. Williams, Mar 26 p 23
Air Cleanup Starts with Your Car, by K. W. Bennett, Jan 8 p 50
Can War on Smog Bring Anti-trust Fog? by James Beizer, Mar 12 p 90
Catalysts: Auto Solution Pollution? by D. N. Williams, May 28 p 21
Clean Up Pollution Control Mess, by P. J. Cathey, June 4 p 62
Earth Day: All Heat, No Light? Apr 30 p 53
Earth Day: Is it Really More Romantic to Tear Down? Apr 23 p 89
Ford's Mobile Lab Tests Emissions, by D. N. Williams, Feb 5 p 23
GM's Engines Emit Tool Sales? by D. N. Williams, Feb 26 p 51
GM Stages Pollution Show-&-Tell Show, by D. N. Williams, Apr 23 p 23
How About a Product-That-Pollutes Tax? by K. A. Kaufman, Mar 26 p 21
Industry is Left to Rock the Cradle, by K. A. Kaufman, Jan 29 p 43
Lead: "Scapegoat in the Auto Emission Hassle", by James Beizer, Apr 16 p 91
Meet Latest Pollutant—Politics, by K. A. Kaufman, Feb 19 p 79
Only Gloom is Moving Well in Detroit, by D. N. Williams, May 7 p 64
Pollution Front: Still Marking Time, by K. W. Bennett, Jan 1 p 76
Pollution Teach-In Raises a Stink, by D. N. Williams, Mar 19 p 44
Pollution: Undigested Technology, by K. W. Bennett, Mar 26 p 57
Pollution: Where Objectivity Ends, by R. A. Wilson, Feb 26 p 59
Price War Ahead for Pollution Kits? by D. N. Williams, Mar 19 p 19
Radicals Kidnap Pollution Baby, by R. A. Wilson, Jan 29 p 42
Tackling Pollution Piecemeal, Mar 5 p 64

Pollution, Water
Ah, Wilderness! Boo! Throw Him Out, by Gene Beaudet, Mar 12 p 5
Another Bill Won't Solve Water Pollution Problem, by K. A. Kaufman, June 18 p 21
Clean Up Pollution Control Mess, by P. J. Cathey, June 4 p 62
Disposing of Liquid Waste Worries, Jan 22 p 65
Earth Day: All Heat, No Light? Apr 30 p 53
Earth Day: Is it Really More Romantic to Tear Down? Apr 23 p 89
Fumbling the Conservation Ball, by I. G. Black, Apr 16 p 51
GM Stages Pollution Show-&-Tell Show, by D. N. Williams, Apr 23 p 23
How About a Product-That-Pollutes Tax? by K. A. Kaufman, Mar 26 p 21
How to Make Money Out of Muck, by M. F. Feilke, May 7 p 63
Meet Latest Pollutant—Politics, by K. A. Kaufman, Feb 19 p 79
Pollution Front: Still Marking Time, by K. W. Bennett, Jan 1 p 76
Pollution: Undigested Technology, by K. W. Bennett, Mar 26 p 57
Tackling Pollution Piecemeal, Mar 5 p 64

Polymers
Plastics Have Alloys, Too, by H. R. Clauser, May 7 p 75

Powdered Metals
Aluminum PM Parts: A Good Start, by B. D. Wakefield, Mar 19 p 60
Forging PM Preforms: Say When, by N. B. Schwartz, June 25 p 55
Gas Seeks Out Powder Metal Flaws, by T. H. Malim, June 25 p 59
Sights Set on PM Preforms, by N. B. Schwartz, Apr 16 p 63
Systems that Keep Automakers on Top, by W. G. Patton, Jan 22 p 55
Why Study PM Fundamentals? May 7 p 26

Power Supply
New Turbine Flexes its Muscles, by T. H. Malim, Feb 19 p 101

Practical Management Associates
Dangle a Different Kind of Carrot, by S. M. Rivkin, Jan 22 p 52

Pratt & Whitney Aircraft Corp.:
Visual Aid Permits Accurate Assembly Training, by T. H. Malim, Mar 19 p 65
What's Happening to Fuel Cells? by A. M. Greene, Mar 19 p 57

Prenco Manufacturing Co.:
Disposing of Liquid Waste Worries, Jan 22 p 65

Pressed Steel Tank Co.:
Tank Industry: Lonely Bull Kicks its Heels Up-High, by K. W. Bennett, June 11 p 83

Pressure Vessels
An Electroslag Welded Vessel? Feb 5 p 68
Field Fabrication's the Answer for Giant Nuclear Vessels, by B. D. Wakefield, Apr 30 p 76
Tank Car Safety Blows Sky High, by S. H. Hockenberry, Feb 12 p 50
Why Multilayer Vessels Don't Shatter, Jan 29 p 58

Prices—Steel Industry's Most Up-to-Date Weekly Tabulation of Prices for All Forms of Steel from Scrap to Strip

Prices
AISI: Profits, Prices and Fat Pacts, by G. J. McManus, June 4 p 57
. . . After Brass Mills Post Higher Charges, by James Beizer, Jan 15 p 55
Agency Split Over Hike in Canadian Tinplate, Apr 30 p 25
Ailing Economy Feels a Touch of Price-Cutitis, June 11 p 84
Aluminum for International Markets Up 0.5¢, by James Beizer, Apr 23 p 149
Antitrust Suit Slams Copper Prices, by James Beizer, June 18 p 52
Brass Mill Prices Start to Roll Down, by James Beizer, June 25 p 89
British Steel Prices May Get Another Boost, Jan 22 p 23
Can Washington Live with 60¢ Copper? by James Beizer, Apr 9 p 60
Consumerism Eyes Design, Materials, by C. J. Suchocki, Jan 22 p 49
Copper Prices: LME Down, U. S. Steady, by R. A. Wilson, Feb 12 p 52
Copper Probe: Come to Terms with What? by Gene Beaudet, Jan 22 p 5
Copper: What About Free Choice? by James Beizer and K. A. Kaufman, Mar 19 p 48
Did the Good Dr. H. Lay an Egg? by James Beizer and K. A. Kaufman, May 14 p 50
Ebbing Prices Prod Consumer Interest, Apr 2 p 118
First Bouquet of Spring Price Hikes Appears, May 7 p 110
Foundrymen Flounder for Price Gauge, by R. A. Wilson, Apr 2 p 61
Galvanized: More Price Backtracking, by K. W. Bennett, June 4 p 58
Government Panel Drags Copper Price Issue into the Daylight, by James Beizer, Jan 22 p 77
Hurry, You've Only Got a Year, by G. J. McManus, Feb 12 p 47
If Everything Else Goes Up, Can Sheet be Far Behind? by G. J. McManus, Apr 9 p 59
Is This the Time for Aluminum Price Hike? Apr 16 p 52
It Looks Like a Steady, Fast Slide for Outside Copper Prices, by James Beizer, May 21 p 111
Mini-Mills Choke on Scrap Prices, by G. J. McManus, Jan 22 p 44
Needed: Adequate Copper Supplies at Predictable Prices, by James Beizer, Mar 26 p 107
New Technology Triggers Stainless Steel Price Cuts, by G. J. McManus, Apr 23 p 86
Nixon Panel to Probe Copper Prices . . ., by James Beizer and K. A. Kaufman, Jan 15 p 54
Now that the Slowdown is Here, by J. D. Baxter, Mar 5 p 44
Pig Iron Rounds Out Price Hikes, by R. A. Wilson, Mar 12 p 87
Sales Down, Stocks Up, Zinc Prices Have to Dip, by James Beizer, Mar 19 p 45
Scrap Boomlet Whips Up Some Price Activity, June 11 p 156
Scrap: Prices Up, Supplies Down, by G. J. McManus, Jan 8 p 52
Soothing the Price-Volume Jitters, by G. J. McManus, June 4 p 66
Steel Prices: Return to Brinkmanship, by K. A. Kaufman and G. J. McManus, Jan 29 p 38
Steel's Profits Fall So Prices Rise, by G. J. McManus, May 7 p 60
Steel Summary: Prices Light Up Dark Market, Jan 29 p 71
Sticks and Stones, No Broken Bones, by K. A. Kaufman and James Beizer, May 28 p 84
Stop Raising Prices, Copper Producers Urged, by James Beizer, Feb 12 p 95
Strikes, Market Muddle Steel Prices Into Trouble, by G. J. McManus, May 28 p 86
Strong Demand and Short Supply Continue to Drive Prices Up, Feb 19 p 157
Surprise! Copper Prices are Up Again, by James Beizer, Jan 8 p 87
Understanding is a Two-Way Street, by Gene Beaudet, Jan 29 p 5
Wage Hike Pinch Felt by Japanese Steel, by G. J. McManus, Jan 29 p 44
Where, Oh Where Will Tin Prices Go? by James Beizer, Apr 23 p 92

Sam Proler, Industries, Inc.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Psychology
Let's Have a Big Hand for Behaviorists, Jan 15 p 25
Personality Wars: Causes, Symptoms, Cures, May 21 p 27

Purchasing
Ailing Economy Feels a Touch of Price-Cuititis, June 11 p 84
Inland Second Steel Company Hit by Reciprocity Action, June 11 p 87
Purchasing Agents Have Their Day at Nonferrous Forum, by James Beizer, May 28 p 163
'60s Sizzle Fizzles, '70s Simmer, by S. M. Rivkin, May 28 p 83

Q

Quality Control
Can Quality Control be Defect Free, by G. J. McManus, June 18 p 59
GM Suppliers Speared for Quality, by D. N. Williams, Jan 22 p 21
Gas Seeks Out Powder Metal Flaws, by T. H. Malim, June 25 p 59

R

Race Cars
"Zero Defects" at Indy, by N. B. Schwartz and Stan Stephenson, June 18 p 65

Racine Hydraulics, Inc.:
The Corporate Dropout, Jan 1 p 81

Radio Corp. of America
Job Market Tight as Recruiting Slips, by S. M. Rivkin, Mar 19 p 51
RCA-IUE Talks Hit Snafu as Clock Runs Out, June 4 p 17

Rafferty-Brown Steel Co., Inc.:
Strapping Gets Automated Assist, May 14 p 69

Railroads
Tank Car Safety Blows Sky High, by S. H. Hockenberry, Feb 12 p 50

Raymond Corp.:
Will Positive Thinking Really Work? by G. J. McManus, June 18 p 57

Recruitment
Get Maximum Mileage from Recruiting, Jan 15 p 56
Job Market Tight as Recruiting Slips, by S. M. Rivkin, Mar 19 p 51
Just How Good are Outside Recruiters? Apr 23 p 27
No College Graduates Need Apply? May 28 p 25
Recruiting is Less Feverish, Jan 22 p 25

Unscrupulous Job Counselors Lure Many Executives, by S. H. Hockenberry, Jan 15 p 61
The Vest-Breasted Job Hopper Paradox, Apr 23 p 27

Refractory Materials
Alumina Shapes Protect Steel Ingots, Apr 9 p 80
Refractories Start Where Metals End, Feb 5 p 62

Renault, Inc.:
U. S. Mini Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55

Republic Steel Corp.:
HUD Takes First Steps in Smashing Modular Home Bugs, by K. A. Kaufman, Mar 5 p 48
Radicals Kidnap Pollution Baby, by R. A. Wilson, Jan 29 p 42

Revere Copper & Brass, Inc.:
Copper Coils Close Interruption Gap, Mar 19 p 62
Stop Raising Prices, Copper Producers Urged, by James Beizer, Feb 12 p 95

Revere Electronic Div.:
Right Paperwork Boosts Output, May 14 p 57

Rex Chainbelt, Inc.:
The Corporate Dropout, Jan 1 p 81
Diamonds Dig Into Stainless, Mar 5 p 66

Reynolds Metal Co.:
Aluminum Demand Continues its Strong Pace, by James Beizer, Feb 19 p 153
Reynolds Wrap Up Aluminum Engine, by D. N. Williams, June 25 p 23

Riveting
Computers Crimp Riveting Problems, Apr 30 p 72

Roberts Automatic Products
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71

Rochester-Bronze & Aluminum Foundry, Inc.:
Foundrymen Flounder for Price Gauge, by R. A. Wilson, Apr 2 p 61

Rockwell Manufacturing Co.:
The Corporate Dropout, Jan 1 p 81

Rods
Dip-Forming Uncurls for Copper Rod, by James Beizer, June 25 p 42

Rohr Corp.:
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63

Rollins International, Inc.:
Pollution Front: Still Marking Time, by K. W. Bennett, Jan 1 p 76

Rollins-Purle, Inc.:
How to Make Money Out of Muck, by M. F. Feilke, May 7 p 63

Royal Dutch Shell Corp.:
Royal Dutch Shell Bets Oil and Metals Mix, by James Beizer, June 4 p 103

Rubber
Answers Sought as URW Walks at Goodyear, Apr 30 p 19
Rubber Talks: Escalator Talks May be the Key, Apr 23 p 19

Rubber Industry
Rubber Industry Prepares to Bounce into New Talks, by R. A. Wilson, Apr 2 p 59

Runge Foundry Cost Systems, Inc.:
Foundrymen Flounder for Price Gauge, by R. A. Wilson, Apr 2 p 61

Joseph T. Ryerson & Son, Inc.:
Hard-core: 'The Man' Makes it Work, by I. G. Black, May 7 p 68
Selling Metals Was Never Like This, by K. W. Bennett, May 7 p 57

S

Safety
Administration Plays Politics with Safety Bill, by K. A. Kaufman, Apr 23 p 21
"Air Bag's Got Bugs", says Automen, by D. N. Williams, May 21 p 23
Approved Safety Bill Heads for Stormy House Fight, by K. A. Kaufman, June 25 p 21
Critics Strong-Arm Muscle Cars, by D. N. Williams, Feb 12 p 21
D. C. to Boston-'I'm Exhausted!', by D. N. Williams, June 18 p 23
How Safe is High-Speed Grinding? June 11 p 105
Senators Set to Tour a 'Deadly, Horrible' Plant, by K. A. Kaufman, Apr 9 p 57
Somebody Has to Pay . . . But Who? by G. J. McManus and K. A. Kaufman, Apr 9 p 58
Tank Car Safety Blows Sky High, by S. H. Hockenberry, Feb 12 p 50

St. Joseph Lead Co.:
Lead and Zinc: Competition Stiffens, by James Beizer, Feb 19 p 91

Satellites
Refractories Start Where Metals End, Feb 5 p 62
Space is for Exploring, by G. J. McManus, Mar 19 p 47

R. M. Schmitz and Co.:
More Claw Marks on the Way to the Top, Feb 26 p 27

Sciaky Bros., Inc.:
EB Unit Works Hard in Soft Vacuum, Mar 12 p 108
Ford Gets High Production from EB Welder, Jan 15 p 26

Science & Technology
Effetes View Science: 'A Sorry State', by D. N. Williams, Jan 8 p 51
R & D: Keep a Stopwatch Running, by P. J. Cathey, Mar 26 p 67
Will Industry Go the Way of Agriculture? by Gene Beaudet, Feb 5 p 5

Scrap—Ferrous Market and Prices, Weekly Tabulation

Scrap
All's Quiet on the Scrap Front, May 21 p 114
Bullish Scrap Market Charges into the '70s, Jan 1 p 172
Continued Softness Runs Through Scrap Market, Mar 26 p 108
Demand Continues to Outpace Supply: Some Areas "Chaotic", Feb 12 p 96
Don't Put U. S. in the Scrap Business, Senate Group Urged, by K. A. Kaufman, Mar 12 p 19
Downdrifting Scrap Market Seeks a Bottom, Mar 19 p 95
Ebbing Prices Prod Consumer Interest, Apr 2 p 118
Expanding Market Keeps Right on Growing, Jan 8 p 88
Few Incidents Muddy Steady Market, May 14 p 98
A Few Rumbles Under a Quiet Surface, Apr 30 p 108
First Bouquet of Spring Price Hikes Appears, May 7 p 110
For the Scrap Market, How "Equal" a Reaction? Mar 12 p 175
Further Signs of Softening Show Up, June 25 p 92
GM Measures Scrap for Steel Coffin, by D. N. Williams, Mar 5 p 43
Ground Hog Market Looks for its Shadow, Jan 22 p 78
Interior Promises Help for Junked Cars, by K. A. Kaufman, Apr 9 p 19
Lusty Market Becomes More Bullish, Jan 29 p 74
Market Charges Ahead with Sharp Increases, Feb 5 p 84
Market Lull Keeps Right on Going, Apr 16 p 94
Market Shows Early Spring Signs of Leveling Off, Mar 5 p 82
Mini-Mills Choke on Scrap Prices, by G. J. McManus, Jan 22 p 44
Mixed Sales Turn up in Quiet Market, Apr 9 p 112
Outlook is Bleak for British Scrap Supply, June 11 p 23
Scrap Boomlet Whips Up Some Price Activity, June 11 p 156
Scrap Export Controls? Not Likely, by K. A. Kaufman, Feb 26 p 53
Scrap Exports: Laclede Seeks Help for a 'Gored Ox', June 4 p 59
Scrap Industry Bucks Laclede Drive to Curb Scrap Exports, by K. A. Kaufman, June 25 p 43
Scrap Industry Gears Up for the '70s, by H. R. Neal, Jan 29 p 46
Scrap Market Rides at Anchor, May 28 p 166
Scrap Price Jolts Electric Furnaces, by K. W. Bennett, Feb 5 p 51
Scrap: Prices Up, Supplies Down, by G. J. McManus, Jan 8 p 52
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88
Scrapmen Talk Weakness Despite Scattered Strength, June 4 p 106
Selective Gains Can't Hush Talk of Weakness, June 18 p 102
Stabilizing Factors Surface in Several Areas, Feb 26 p 94
Stainless Scrap Skids Downward, Jan 15 p 100
Strong Demand and Short Supply Continue to Drive Prices Up, Feb 19 p 157
Truck Strikes Disrupt Level Market, Apr 23 p 152
World Market Battles for U. S. Scrap, by K. W. Bennett, Mar 5 p 47

Seiki Corp.:
Sun Rises on Japan's Machine Tools, by I. G. Black, Apr 23 p 91

Selas Corp. of America
Copper Tubing Brazed in Volume, May 7 p 83

Shipbuilding
Dry Dock Launches New Ideas, Mar 19 p 64
Finland Puts Emphasis on Metals, by H. R. Neal, Apr 30 p 58
Ingalls West: Yard of the Future, by B. D. Wakefield and R. R. Irving, Feb 12 p 63
Ore Shipping: A Time to Consider All Seasons? by R. A. Wilson, Jan 22 p 48
Shipbuilders Tie Up to Systems, by I. G. Black, Feb 12 p 53
Ships Skim Over Water on Bubbles, Jan 22 p 66

Norton Simon, Inc.:
Look at Managing in the Year 2000, Jan 1 p 27
Technology May Take Back Seat, Jan 1 p 27

A. O. Smith Corp.:
Talk Show is Communications Hit, by K. W. Bennett, Jan 8 p 59

Snyder Corp.:
Transfer Line Turns for the Better, May 7 p 82

Society of Aerospace Material and Process Engineers
Aerospace Faces a Tough Decade, by N. B. Schwartz and R. R. Irving, June 11 p 99
Aerospace Gets Set for a Shot-in-the-Arm, May 28 p 26
Explosive Bonding Packs Strength Into Metal Composites, Jan 29 p 60

Society of Manufacturing Engineers
Computers Show Tools the Way, June 4 p 78
Gas Seeks Out Powder Metal Flaws, by T. H. Malim, June 25 p 59
Lathes Take New Turn at SME Tool Show, Apr 23 p 28
On the Way to Detroit's SME Show . . ., by D. N. Williams, Apr 16 p 53
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

Society of the Plastics Industry
Plastic, Plastic, Who's Got the Plastic? Mar 12 p 26

Sociology
GM Flubs its Winning Reputation, May 21 p 63
Hard-core: 'The Man' Makes it Work, by I. G. Black, May 7 p 68
Sure Power Works, But to What End? by Gene Beaudet, Apr 2 p 5
There's No Such Thing as Standing Still, by Gene Beaudet, June 4 p 5

Southwest Steel Rolling Mills, Inc.:
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71

Southwestern Ohio Steel, Inc.:
Machine Boosts Plant's Handling Efficiency, Jan 29 p 57

Spacerays Inc.:
Microcracking Eliminated in Laser Drilling, Apr 2 p 28
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Sperry Rand Corp.:
The Corporate Dropout, Jan 1 p 81
Laser Brightens Hydraulics Outlook, June 25 p 28

Spiras Systems, Inc.:
Why Computers Fail . . . Or Succeed, by J. E. Sandford, Apr 30 p 63

Stainless Steel
Diamonds Dig Into Stainless, Mar 5 p 66
Is Stainless Facing a Crisis? Jan 29 p 51
New Technology Triggers Stainless Steel Price Cuts, by G. J. McManus, Apr 23 p 86

XUM

Nippon Kokan Develops a Better Stainless Steel, June 11 p 26
PH Stainless Challenges Titanium, by N. B. Schwartz, Feb 5 p 59
Soothing the Price-Volume Jitters, by G. J. McManus, June 4 p 66
Stainless: Is the Stage Set for 200 Series? Feb 19 p 97
What Price Stainless Steel? June 25 p 60

Stampings
Job Shops Cut by Turndown's Edge, by K. W. Bennett, Mar 19 p 41
Metal Stamping Suits Plastic, Apr 9 p 77
Press Builders Take Systems Path, by B. D. Wakefield, Mar 5 p 57
Stampers Eye Copper Substitutes, by B. D. Wakefield, Apr 30 p 74

Standard-Modern Tool Co., Ltd.:
Low Costs Develop for NC Lathes, by T. H. Malim, May 21 p 86

Standard Oil Co. of New Jersey
Direct Reduction Draws a Crowd, by G. J. McManus, Feb. 19 p 84

Standard Pressed Steel Co.:
Ailing Economy Feels a Touch of Price-Cutitis, June 11 p 84

Standards
Metalworking Gets Crack at Forming New SIC Categories, Mar 26 p 61
Standardization Claims First Victim, by D. N. Williams, Mar 12 p 21
Taking Guesswork Out of Steel Measuring, June 4 p 77

Stanford University
And Now—Introducing the Paul Principle, Feb 19 p 25
Coming: A New Breed of Engineer, Jan 15 p 25
Fast Exit Coming for the Crisis-Eater? June 18 p 27
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99
New Approach: Think Small in a Big Way, Jan 22 p 25
Proxy Pressure to Pressure Managers, May 14 p 25

Stanley Works
Strapping Gets Automated Assist, May 14 p 69

Steel
Britain Tries to Marry Special Steel Industry, Apr 23 p 25
British Steel Fights Nagging Backaches, by I. G. Black, May 7 p 61
British Steel Prices May Get Another Boost, Jan 22 p 23
Common Market to Extend Duty-Free Imports of Steel, Jan 29 p 23
Cyclops Eyes Detroit Steel, by D. N. Williams, Apr 2 p 57
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65
Finland Puts Emphasis on Metals, by H. R. Neal, Apr 30 p 58
Hurry, You've Only Got a Year, by G. J. McManus, Feb 12 p 47
If Everything Else Goes Up, Can Sheet be Far Behind? by G. J. McManus, Apr 9 p 59
Inland Second Steel Company Hit by Reciprocity Action, June 11 p 87
Japanese Alloy Reduces Friction, Feb 19 p 26
Japanese Mill Increases Quality Output with ASEA-SKF Unit, June 4 p 26
Japanese Steel to Close on 100 Million Ton Level, Mar 19 p 21
Japan's Top Steelmakers Plot Hefty Spending Hike, Apr 23 p 25
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71
Mystery Shrouds Steel Share Grab, by C. J. Suchocki, June 25 p 41
'Nasty Surprises' Stalk Steel's Year, by G. J. McManus, June 11 p 81
Selling Metals Was Never Like This, by K. W. Bennett, May 7 p 57
'71 Orders Starting, So are Changeovers, June 18 p 99
Steel Prices: Return to Brinkmanship, by K. A. Kaufman and G. J. McManus, Jan 29 p 38
Steel Summary: Autos to Take 12 Pct Less Steel in 1970, Feb 26 p 91
Steel Summary: Cars, Trucks, Bucks Cloud the Picture, May 28 p 161
Steel Summary: Decade of Change in the Seventies, Jan 1 p 169
Steel Summary: Explosive Strike Pressures Grow, May 21 p 109
Steel Summary: Export Gain Offsets Domestic Dip, Feb 19 p 151
Steel Summary: Exports Gain on Imports, Mar 12 p 169
Steel Summary: How Soon for GM's Coffin Steel? Mar 26 p 105
Steel Summary: Labor Hoists the Warning Flag, Apr 16 p 89
Steel Summary: Looking for Spring in Auto Orders, Apr 2 p 115
Steel Summary: Mini-Mills Add to Shipments, May 14 p 93
Steel Summary: Optimism Holds for the Second Week, Feb 12 p 93
Steel Summary: Order Rate Continues to Drift, Mar 19 p 89
Steel Summary: Order Slide Appears Checked, Feb 5 p 81
Steel Summary: Prices Light Up Dark Market, Jan 29 p 71
Steel Summary: Shipping Tie-Up Creates Havoc, Apr 30 p 103
Steel Summary: Slowing, but No Collapse, Jan 8 p 85
Steel Summary: Small Bonus in Automotive Orders, June 25 p 87
Steel Summary: Steel Sags with Autos, Jan 15 p 97
Steel Summary: Steelmakers Write Off the '70 Cars, Mar 5 p 79
Steel Summary: Strike Effects to Last for Weeks, Apr 23 p 147
Steel Summary: Summer Looks a Little Better, June 11 p 151
Steel Summary: Time for a Downward Revision? Jan 22 p 75
Steel Summary: Truck Strike Has Producers Edgy, May 7 p 105
Steel Summary: Trucker Accord Comes None Too Soon, June 4 p 101
Steel Summary: World Market Moves to Equilibrium, Apr 9 p 109
Steelmen Argue Over Global View, by H. R. Neal and G. J. McManus, May 21 p 68
Steel's Profits Fall So Prices Rise, by G. J. McManus, May 7 p 60
Strikes, Market Muddle Steel Prices Into Trouble, by G. J. McManus, May 28 p 86
Taking Guesswork Out of Steel Measuring, June 4 p 77
U. S. Steelmen of Two Minds on Nippon Merger, Apr 9 p 23
Wage Hike Pinch Felt by Japanese Steel, by G. J. McManus, Jan 29 p 44
What Happened to the February Dip? by K. W. Bennett, Feb 26 p 56
World's Product Hunger Unslaked, by G. J. McManus, Apr 2 p 55

Steel Industry
AISI: Profits, Prices and Fat Pacts, by G. J. McManus, June 4 p 57
Another Bill Won't Solve Water Pollution Problem, by K. A. Kaufman, June 18 p 21
Booming World Steel Bends Quota Systems—a Little, by G. J. McManus, Feb 19 p 83
. . . But Mills Mull More than Money, by G. J. McManus, Mar 12 p 89
Can Phoenix Rise from the Ashes? by C. J. Suchocki, Jan 8 p 54
Conglomerates in Steel: Good Grief? by G. J. McManus, Apr 23 p 84
Cyclops Eyes Detroit Steel, by D. N. Williams, Apr 2 p 57
. . . Diversification is One Way to Go, by D. N. Williams, Jan 15 p 59
Earth Day: All Heat, No Light? Apr 30 p 53
If Everything Else Goes Up, Can Sheet be Far Behind? by G. J. McManus, Apr 9 p 59
Incentive Hassle Threatens Steel Slowdown, Mar 12 p 17
Is Stainless Facing a Crisis? Jan 29 p 51
It Was a Very Bad Year for Steel Profits, by G. J. McManus, Feb 5 p 48
'Nasty Surprises' Stalk Steel's Year, by G. J. McManus, June 11 p 81
Record Rich and Profit Poor, Apr 9 p 62
Senator, This Way to the Rolling Mill, by K. A. Kaufman, Jan 22 p 41
Silence May be Golden, But . . ., by G. J. McManus, Mar 5 p 41
Steel Backs Off From Quota Demands, by K. A. Kaufman, Apr 23 p 88
Steel Boom Weakens Quota Cries, by K. A. Kaufman, June 11 p 86
Steel Gets a Philly Plan of its Own, Feb 12 p 17
Steel Prices: Return to Brinkmanship, by K. A. Kaufman and G. J. McManus, Jan 29 p 38
Steel's Profits Fall So Prices Rise, by G. J. McManus, May 7 p 60
Steel's Salvation in a Shrinking Market . . ., by R. A. Wilson, Jan 15 p 58
Steel Summary: Mini-Mills Add to Shipments, May 14 p 93
Steel Summary: Shipping Tie-Up Creates Havoc, Apr 30 p 103
Steelmen Argue Over Global View, by H. R. Neal and G. J. McManus, May 21 p 68
Steelmen Dust Off New Plant Plans, by G. J. McManus, Apr 9 p 61
Steelworkers Press for Incentive Pay, June 11 p 17
Strikes, Market Muddle Steel Prices Into Trouble, by G. J. McManus, May 28 p 86
Teamsters Walkout Threatens Shutdowns, Apr 23 p 90
Trucker Wildcats Give Steelmen Big Headache, Apr 16 p 50
Understanding is a Two-Way Street, by Gene Beaudet, Jan 29 p 5

Steel Service Center Institute
Don't Despair—Wives Can Help, Feb 12 p 25
Happiness is a Happy Manager Who . . ., Apr 2 p 27
. . . Seeks Mental Change of Venue, Apr 2 p 27

Steel Summary—Weekly Appraisal of Marketing and Production

Steelmaking
Computer Sets Slabbing Mill Specs, June 11 p 103
Direct Reduction Draws a Crowd, by G. J. McManus, Feb 19 p 84
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65
Foreign Steelmen Covet Computers, Apr 16 p 65
GM's Recon Steel Attracts the Mills, Apr 30 p 57
Georgetown Grows Older . . . and Bolder, by G. J. McManus, Apr 16 p 54
Low-Sulfur Steel Makes a Profit, Apr 16 p 68
Machine Boosts Plant's Handling Efficiency, Jan 29 p 57
Mini-Mills Leery of Midi-Mill Size, by G. J. McManus, May 21 p 71
Pulpits Pack Factory-Tested Punch, by A. M. Greene, Mar 5 p 63
Steel in a World of Computers, by A. M. Greene, Feb 26 p 67

Steelmet, Inc.:
Scrapmen: Last of the Big Spenders? by K. W. Bennett, June 11 p 88

Strappings
Strapping Gets Automated Assist, May 14 p 69

Structures
Why Multilayer Vessels Don't Shatter, Jan 29 p 58

Sun Oil Co.:
Why Computers Fail . . . Or Succeed, by J. E. Sandford, Apr 30 p 63

Sundstrand Machine Tool Co.:
Machine Tools in New Era of Change, by J. E. Sandford, Jan 8 p 63

Superior Electric Co.:
Low Costs Develop for NC Lathes, by T. H. Malim, May 21 p 86

Superior Tube Co.:
Small Tubing that Can Take the Heat, May 14 p 66

Sweden
Low-Sulfur Steel Makes a Profit, Apr 16 p 68

Sylvania Electric Products, Inc.:
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99

Systems, Science and Software Corp.:
Shipbuilders Tie Up to System, by I. G. Black, Feb 12 p 53

T

TRW, Inc.:
Forging PM Preforms: Say When, by N. B. Schwartz, June 26 p 55
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

Tantalum Alloys
Small Tubing that Can Take the Heat, May 14 p 66

Taxes
Excise Taxes Fingered as Fiscal Crutch, Jan 15 p 19
How About a Product-That-Pollutes Tax? by K. A. Kaufman, Mar 26 p 21
Keep That Surcharge Rolling in This Year, CED Urges, by K. A. Kaufman, Jan 1 p 21
Revenue Reform Act Loaded Against Capital Growth? by K. A. Kaufman, Apr 30 p 21
Tax Break for Domestic Exporters? by K. A. Kaufman, May 21 p 67
Tax Reform Adds Industry Burden, by K. A. Kaufman, Jan 8 p 49

Techfront—Weekly Analysis of New Developments in the Metalworking and Related Industries

Technology
The New Migrants—Technicians, Mar 12 p 25
Technology May Take Back Seat, Jan 1 p 27

Tekko Roren
Wage Hike Pinch Felt by Japanese Steel, by G. J. McManus, Jan 29 p 44

Templates
Steel Ribbon Calls Line Signals, Apr 2 p 79

Texas Instruments, Inc.:
Are Two Metals Better Than One? by A. M. Greene and R. R. Irving, Apr 30 p 68

Textiles
Textile Talks May Have Metalworking Twist, Mar 26 p 25

Textron, Inc.:
Ships Skim Over Water on Bubbles, Jan 22 p 66
Tank Industry: Lonely Bull Kicks its Heels Up-High, by K. W. Bennett, June 11 p 83

Tin
Agency Split Over Hike in Canadian Tinplate, Apr 30 p 25
Where, Oh Where Will Tin Prices Go? by James Beizer, Apr 23 p 92

Titanium
Forging Teamwork Boosts Titanium, May 21 p 84
PH Stainless Challenges Titanium, by N. B. Schwartz, Feb 5 p 59
Will Titanium Brazing Bridge Joining Gap? Mar 5 p 62

Tool and Die Industry
Tool & Die: Things are Good, But—, by D. N. Williams, Feb 12 p 48

Towers, Perrin, Foster & Crosby
Making Sure the Real Message Gets Across, June 4 p 25

Town & Country Propane Co.:
Well, How About an Energy Day, by K. W. Bennett, May 14 p 47

Training Programs
Deferment Plan Threatens Training Programs, Apr 30 p 19
Hard-core: 'The Man' Makes it Work, by I. G. Black, May 7 p 68
NAB Hangs On Despite Job Slump, by K. W. Bennett, Feb 19 p 82
Visual Aid Permits Accurate Assembly Training, by T. H. Malim, Mar 19 p 65
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

Transmissions
Hydrostatics Pressure into Machine Tools, Conveyors, by D. N. Williams, Jan 8 p 53

Transportation
. . . Diversification is One Way to Go, by D. N. Williams, Jan 15 p 59
Will DOT Find its Heart in Frisco? by J. Miller, Mar 12 p 92

Triangle Industries, Inc.:
Antitrust Suit Slams Copper Prices, by James Beizer, June 18 p 52

Trucks
Ford Undecided Over Communist Truck Query, May 14 p 23
Shafts Fatigue Less After Salt Bath, Mar 19 p 66

Tubing
Copper Tubing Brazed in Volume, May 7 p 83
New Mill Pierces Seamless Tubing Industry, Mar 5 p 26
Small Tubing that Can Take the Heat, Mar 14 p 66
Tubing that Transfers Heat Faster, Mar 12 p 107

Tucker Tool & Die
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71

Tufts University
New Turbine Flexes Its Muscles, by T. H. Malim, Feb 19 p 101

Tungsten
Tungsten Dopes Metals to New Heights, Mar 19 p 24

Turbines
New Turbine Flexes Its Muscles, by T. H. Malim, Feb 19 p 101

U

U.S.S.R.
And Now the Second Prize Goes To . . ., by Gene Beaudet, Feb 26 p 5
Ford Undecided Over Communist Truck Query, May 14 p 23
Soviets Prevent Chips From Falling, May 28 p 100
Will Mr. Ford Get It in the Neck? by Gene Beaudet, May 14 p 5

U.S. Army Materials and Mechanics Research Center
Alloys Get a New Buildup, by T. H. Malim, Mar 26 p 79
Tungsten Dopes Metals to New Heights, Mar 19 p 24

U.S. Bureau of Mines
Pollution: Undigested Technology, by K. W. Bennett, Mar 26 p 57
U. S. Heads for the Mineral Poorhouse, by B. D. Wakefield, June 4 p 71

U.S. Department of Commerce
Newest Quiz Craze: Hitting the Big Export Jackpot, by R. A. Wilson, June 18 p 55

U.S. Department of Interior
Interior Promises Help for Junked Car Processing, by K. A. Kaufman, Apr 9 p 19

U.S. Department of Labor
DOL Adopts New Rules on Pay Garnishment, June 4 p 17
DOL Reviews UMW Election in Wake of Slayings, Jan 15 p 17
DOL Sues UMW Election Rerun, Mar 12 p 17
DOL Taps Prisons for New Manpower Supply, Feb 19 p 17
New DOL Head Faces Tough Tests, June 18 p 19
Steel Gets a Philly Plan of its Own, Feb 12 p 17

U.S. Department of Transportation
"Air Bag's Got Bugs", says Automen, by D. N. Williams, May 21 p 23
Will DOT Find Its Heart in Frisco? by J. Miller, Mar 12 p 92

U.S. Industries
Press Builders Take Systems Path, by B. D. Wakefield, Mar 5 p 57

U.S. Post Office
Is the Postal Strike Really Over? by Gene Beaudet, Apr 9 p 5
Mail Carriers Walk—For Higher Pay, Mar 26 p 19
Mails Roll Again as Leaders Seek Answers, Apr 2 p 19
Sure Power Works, But to What End? by Gene Beaudet, Apr 2 p 5

U.S. Steel Corp.:
Antitrust Chief Hails Success in Reciprocity Crackdown, by K. A. Kaufman, Feb 12 p 19
. . . Diversification Is One Way to Go, by D. N. Williams, Jan 15 p 59
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65
Foreign Steelmen Covet Computers, Apr 16 p 65
Pollution: Where Objectivity Ends, by R. A. Wilson, Feb 26 p 59
Senators Set to Tour a 'Deadly, Horrible' Plant, by K. A. Kaufman, Apr 9 p 57
Steel Backs Off From Quota Demands, by K. A. Kaufman, Apr 23 p 88
Trucker Wildcats Give Steelmen Big Headache, Apr 16 p 50
USS Has High Hopes in Housing Derby, Jan 15 p 59
U.S. Steel's Structural Proving Ground, Feb 5 p 66
USWA Charges U.S. Steel in Incentive Backdown, by G. J. McManus, Feb 26 p 57

Undersea Technology
U.S. Heads for the Mineral Poorhouse, by B. D. Wakefield, June 4 p 71
Who Will Rule the Ocean Floor? by S. M. Rivkin, Apr 16 p 57

Unimation, Inc.:
Robots March Into Metalworking, by B. D. Wakefield, May 7 p 79

Union Carbide Corp.:
R & D: Keep a Stopwatch Running, by P. J. Cathey, Mar 26 p 67
Tubing That Transfers Heat Faster, Mar 12 p 107

United Aircraft Corp.:
More Power to New Breed of Lasers, by T. H. Malim, Apr 23 p 99
Why the Chips Should Fly Faster, by R. A. Wilson, May 14 p 61

United Auto Workers
Auto Talks: New Name, Same Game? May 28 p 17
Canada Jawbone Needs Rewiring, by D. N. Williams, June 25 p 46
Ford Is Horsing Around with Pinto, Claims UAW, by D. N. Williams, June 18 p 56
How High Will UAW Wage Increases Climb in '70? by D. N. Williams, Apr 30 p 56
'It's Time for General Motors', by D. N. Williams, June 4 p 61
Labor '70: Color It Green and Angry, by C. J. Suchocki, Jan 1 p 72
UAW, GM Swap Charges as Secret Auto Deal Sours, Jan 29 p 17
UAW Message to Detroit: Pay Up or Shut Down, by D. N. Williams, Jan 15 p 57
UAW Talks: Keep an Eye on Automation Issue, Mar 19 p 15
UAW Targets C-O-L in Coming Auto Bargaining, Feb 12 p 17
Wage Reopeners for UAW? Not Likely, Mar 26 p 19

United Kingdom
Britain Tries to Marry Special Steel Industry, Apr 23 p 25
British Budget Smiles Favorably on Industry, May 7 p 23
British Steel Fights Nagging Headaches, by I. G. Black, May 7 p 61
Outlook Is Bleak for British Scrap Supply, June 11 p 23

United Mine Workers of America
Court Review Signals Hard Times for Labor, Apr 9 p 17
DOL Reviews UMW Election in Wake of Slayings, Jan 15 p 17
DOL Sues UMW Election Rerun, Mar 12 p 17
UMW Decides to Take a Look on Its Own, Mar 5 p 17
Yablonski Slayings Leave Coal Fields, UMW Uneasy, Jan 22 p 17

United Rubber Workers
Answers Sought as URW Walks at Goodyear, Apr 30 p 19
Rubber Industry Prepares to Bounce Into New Talks, by R. A. Wilson, Apr 2 p 59

United Steelworkers of America
Court Says Steel's Odd Couple Discriminates, by K. A. Kaufman, May 7 p 62
Incentive Hassle Threatens Steel Slowdown, Mar 12 p 17
Senators Set to Tour a 'Deadly, Horrible' Plant, by K. A. Kaufman, Apr 9 p 57
Steelworkers Press for Incentive Pay, June 11 p 17
USWA Charges U. S. Steel in Incentive Backdown, by G. J. McManus, Feb 26 p 57

Univac Div.:
Computers Thrive in Terminal Atmosphere, May 14 p 26

Universal-Cyclops Specialty Steel Div.:
Sights Set on PM Preforms, by N. B. Schwartz, Apr 16 p 63

Universal Oil Products Co.:
Air Cleanup Starts with Your Car, by K. W. Bennett, Jan 8 p 50
Tubing that Transfers Heat Faster, Mar 12 p 107

University of Colorado
Do the Guy a Favor: Fire Him, by D. N. Williams, Feb 5 p 55

University of Georgia
More Claw Marks on the Way to the Top, Feb 26 p 27

University of Indiana
Are You a Decider or Multiplier Manager? Mar 26 p 27
Happiness Is a Happy Manager Who . . ., Apr 2 p 27

University of Michigan
Computers Getting More Friendly, Jan 8 p 25
Pollution Teach-In Raises a Stink, by D. N. Williams, Mar 19 p 44
Put Human Resources on the P&L Sheet, Jan 29 p 25
Why Is Everybody Leaving? by D. N. Williams, Feb 12 p 56

University of Newcastle
Why Multilayer Vessels Don't Shatter, Jan 29 p 58

University of Tennessee
Take Long-Term View on Consumerism, Apr 30 p 27

University of Utah
Every Manager's Dream: His Own Computer, Jan 8 p 25

University of Wisconsin
Cutting Seeks the Better Way, by J. E. Sandford, Apr 2 p 71

Used Machinery—Clearing House for Variety of Not-So New Equipment

V

Vacuum Technology
Two Chambers Are Better Than One, Mar 26 p 82

Vending Machines
Growth Shortchanges Vending Makers, by I. G. Black, Mar 26 p 62

XUM

Verson Allsteel Press Co.:
Guidelines, Yes . . . Controls, No, May 28 p 81

Volkswagen, AG
U. S. Mini-Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55

Volvo, Inc.:
U. S. Mini-Cars vs the Imports, by James Beizer and D. N. Williams, Apr 9 p 55

W

Waldes Kohinoor, Inc.:
Austempering Alters Brittle Failure, May 28 p 106

Wankel GmbH
Is GM Trying to Wangle the Wankel? by D. N. Williams, June 11 p 21

Warner & Swasey Co.:
The Corporate Dropout, Jan 1 p 81
If They're Nervous, It Doesn't Show, by K. W. Bennett, Feb 5 p 46
Toolmen Play Both Sides of the Oceans, by R. A. Wilson, Mar 5 p 45

Warner Electric Brake & Clutch Co.:
Profits Lure Industry Overseas . . . by K. W. Bennett, May 28 p 88

Washington News Report—Weekly Interpretation of Legislation and Other Government (See Also K. A. Kaufman)

Wean Industries, Inc.:
Pollution Front: Still Marking Time, by K. W. Bennett, Jan 1 p 76

Welding
An All Electroslag Welded Vessel? Feb 5 p 68
The AWS Welding Show Better Late than Never, June 18 p 28
Dry Dock Launches New Ideas, Mar 19 p 64
EB Unit Works Hard in Soft Vacuum, Mar 12 p 108
Flux Blending Gets New Twists, Mar 5 p 60
Ford Gets High Production from EB Welder, Jan 15 p 26
Forging Teamwork Boosts Titanium, May 21 p 84
Friction Welding Gets a Smooth Ride, Mar 26 p 28
One-Side Welding: It's Big in Japan, by Koichi Masubuchi, Feb 26 p 72
Welded Member in Indy Car Gives Driver the Edge, Apr 30 p 28
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71
Welding's Future Throws Sparks, Jan 22 p 47

Fritz Werner Machine Tool Corp.:
. . . As Foreign Producers Eye U. S., by W. J. Kalb, May 28 p 89

Western Reserve University
Earth Day: Is it Really More Romantic to Tear Down? Apr 23 p 89

Westinghouse Electric Corp.:
New Unit Joins Race to Age NC Controls, by R. A. Wilson, June 4 p 60
Power Equipment: More Import Lumps, by G. J. McManus, Mar 19 p 43
Suit Links, Westinghouse, Japanese, by K. A. Kaufman, Apr 30 p 61

Westinghouse Learning Corp.:
Welders Train to Fit Industry's Needs, by N. B. Schwartz, Apr 9 p 71

Wheeling-Pittsburgh Corp.:
GM's Recon Steel Attracts the Mills, Apr 30 p 57

Wire
. . . But Mills Mull More than Money, by G. J. McManus, Mar 12 p 89

Dean Witter & Co.:
Copper Prices: LME Down, U. S. Steady, by R. A. Wilson, Feb 12 p 52

World Executives, Inc.:
Unscrupulous Job Counselors Lure Many Executives, by S. H. Hockenberry, Jan 15 p 61

Worthington Corp.:
Centrifugals Fill Gap in Air Power, by J. J. Obrzut, Apr 9 p 78

Wyman-Gordon Co.:
Forging Teamwork Boosts Titanium, May 21 p 84

Wytmar & Co., Inc.:
Just How Good are Outside Recruiters? Apr 23 p 27
The Vest-Breasted Job Hopper Paradox, Apr 23 p 27

X

Xerox Corp.:
The Corporate Dropout, Jan 1 p 81

Y

Yawata Iron & Steel Co.:
U. S. Steelmen of Two Minds on Nippon Merger, Apr 9 p 23

Youngstown Sheet & Tube Co.:
Conglomerates in Steel: Good Grief? by G. J. McManus, Apr 23 p 84
Do We Need a New Steel Technology? by G. J. McManus, Jan 15 p 65

Z

Zinc
Lead and Zinc: Competition Stiffens, by James Beizer, Feb 19 p 91
Lead and Zinc Men Discuss Marketing Future, June 11 p 85
Sales Down, Stocks Up, Zinc Prices Have to Dip, by James Beizer, Mar 19 p 45
Smelters' Stocks of Zinc Skyrocket to 138,000 Tons, by James Beizer, June 18 p 101

Zinc Institute
Sales Down, Stocks Up, Zinc Prices Have to Dip, by James Beizer, Mar 19 p 45

XUM

AUTHOR INDEX

B

Baxter, J. D.
Mr. Consumer, It's Your Move Now, May 14 p 55
Now that the Slowdown is Here . . ., Mar 5 p 44

Beaudet, Gene
Ah, Wilderness! Boo! Throw Him Out! Mar 12 p 5
Ah, Wilderness! Whose? And What For, Feb 19 p 5
And Now the Second Prize Goes To . . ., Feb 26 p 5
Business and the '70's, 2—The Problems From Within, Jan 8 p 5
Business and the '70's 3—Will Malaise Settle Over U.S. Industry? Jan 15 p 5
Business and the '70's, 1—Wishing Won't Make it So, Jan 1 p 5
The Case for Wage and Price Controls, Feb 12 p 5
Copper Probe: Come to Terms with What? Jan 22 p 5
Doc Houthakker: Don't Mess Things Up More! Mar 19 p 5
Dr. McCracken: We Sure Hope You are Right, Mar 26 p 5
The Growing, Silent Minority, May 21 p 5
Is it Time to Stop Cooling It? Apr 23 p 5
Is the Postal Strike Really Over? Apr 9 p 5
It's the Game that Counts, Not the Plan, May 28 p 5
Mr. President, Let's Cut Down the Options, June 11 p 5
1970 Business: Is Someone Crying Wolf? Jan 1 p 69
Not Even Casey Could Explain This, Apr 16 p 5
Stock Market Got You Down? How About This? May 7 p 5
Sure Power Works, But to What End? Apr 2 p 5
There's No Such Thing as Standing Still, June 4 p 5
Understanding is a Two-Way Street, Jan 29 p 5
What Did Mr. Nixon Really Say? June 25 p 5
When Will the Government Let Go? Mar 5 p 5
Will Earth Week Go Up in Smoke? Apr 30 p 5
Will Industry Go the Way of Agriculture? Feb 5 p 5
Will Mr. Ford Get It in the Neck? May 14 p 5
World Trade and the Problems from Within, June 18 p 5

Beizer, James
. . . After Brass Mills Post Higher Charges, Jan 15 p 55
Aluminum Car Radiators: If at First You Don't Succeed, . . . Jan 15 p 99
Aluminum Demand Continues its Strong Pace, Feb 19 p 153
Aluminum for International Markets Up 0.5¢, Apr 23 p 149
Antitrust Suit Slams Copper Prices, June 18 p 52
Brass Mill Prices Start to Roll Down, June 25 p 89
Can War on Smog Bring Antitrust Fog? Mar 12 p 90
Can Washington Live with 60¢ Copper? Apr 9 p 60
A Copper Calm? Well, There's Usually Something to . . ., Mar 5 p 81
Copper Institute Figures Don't Tell Full Story, Feb 5 p 83
Copper Producers Ready for U. S. Investigators, Jan 29 p 73
Copper: What About Free Choice? Mar 19 p 48
Did the Good Dr. H. Lay an Egg? May 14 p 50
Dip-Forming Uncurls for Copper Rod, June 25 p 42
For American Can, a Substantially Reduced Base, Feb 26 p 93
A Good Metal—Like Copper—is Hard to Find, Apr 30 p 105
Government Figures Tell it Like it Was, Mar 12 p 171
Government Panel Drags Copper Price Issue Into the Daylight, Jan 22 p 77
How Aluminum Dodged a First Quarter Downturn, Apr 2 p 117
Inco Rallies, But Nickel Still Must Sprint to Stay Even, Mar 19 p 91
Is Washington Hiding the Copper Industry Study? May 7 p 107
It Looks Like a Steady, Fast Slide for Outside Copper Prices, May 21 p 111
Lead and Zinc: Competition Stiffens, Feb 19 p 91
Lead: "Scapegoat in the Auto Emission Hassle," Apr 16 p 91
Mining's Public Land Prospects Soars, June 25 p 49
Nearly Everybody is a Winner, Feb 19 p 81
Needed: Adequate Copper Supplies at Predictable Prices, Mar 26 p 107
Nickel Plots a Course to 1.7 Billion lb Year by 1976, Jan 1 p 171
Nixon Panel to Probe Copper Prices. . . ., Jan 15 p 54
Nonferrous Profits So Good They're Embarrassing, May 14 p 95
Optimism is the Name of the Game for Aluminum Industry, June 11 p 153
Purchasing Agents Have Their Day at Nonferrous Forum, May 28 p 163
Royal Dutch Shell Bets Oil and Metals Mix, June 4 p 103
Sales Down, Stocks Up, Zinc Prices Have to Dip, Mar 19 p 45
'70 Shapes Up as Another Bright Year for Aluminum, Apr 9 p 111
Smelters' Stocks of Zinc Skyrocket to 138,000 Tons, June 18 p 101
Sticks and Stones, No Broken Bones, May 28 p 84
Stop Raising Prices, Copper Producers Urged, Feb 12 p 95
Surprise! Copper Prices are Up Again, Jan 8 p 87
U S. Mini Cars vs. the Imports, Apr 9 p 55
Well, 2nd Half Business Will Be . . ., June 18 p 48
Where, Oh Where Will Tin Prices Go? Apr 23 p 92

Bennett, K. W.
Air Cleanup Starts with Your Car, Jan 8 p 50
Don't Tie Us Up, Exporters Urge U. S., Feb 26 p 54
Electric Power Pros Cut Nuclear Spending, Apr 30 p 60
Energy Scramble Leads to Coal Gas, Feb 12 p 51
Farm Equipment: Year of the Locust, May 21 p 64
Galvanized: More Price Backtracking, June 4 p 58
Give U. S. Designer a (Helping) Hand, Mar 5 p 82
If They're Nervous, it Doesn't Show, Feb 5 p 46
Inland Cans its Tinplate Line . . ., Mar 12 p 88
Job Shops Cut by Turndown's Edge, Mar 19 p 41
Layoffs Point to Black Days Ahead, Jan 15 p 51
NAB Hangs On Despite Job Slump, Feb 19 p 82
Pollution Front: Still Marking Time, Jan 1 p 76
Pollution: Undigested Technology, Mar 26 p 57
Profit Hunter Bags His Quota—Plus, Apr 2 p 65
Profits Lure Industry Overseas . . ., May 28 p 88
Scrap Price Jolts Electric Furnaces, Feb 5 p 51
Scrapmen: Last of the Big Spenders? June 11 p 88
Selling Metals Was Never Like This, May 7 p 57
Talk Show is Communications Hit, Jan 8 p 59
Tank Industry: Lonely Bull Kicks its Heels Up-High, June 11 p 83
Watch the Robot Plug Himself In, Apr 16 p 47
Well, How About An Energy Day? May 14 p 47
Well, 2nd Half Business Will Be . . ., June 18 p 48
What Happened to the February Dip? Feb 26 p 56
World Market Battles for U. S. Scrap, Mar 5 p 47

Black, I. G.
British Steel Fights Nagging Headaches, May 7 p 61
Fumbling the Conservation Ball, Apr 16 p 51
Growth Shortchanges Vending Makers, Mar 26 p 62
Hard-core: 'The Man' Makes it Work, May 7 p 68
Shipbuilders Tie Up to Systems, Feb 12 p 53
Sun Rises on Japan's Machine Tools, Apr 23 p 91

C

Cathey, P. J.
Clean Up Pollution Control Mess, June 4 p 62
Computers: Here Comes Facility Man, Mar 5 p 49
"Involved Managers Welcome Change", Feb 26 p 62
R & D: Keep a Stopwatch Running, Mar 26 p 67
Switch Line, Staff Jobs to Build Better Managers, May 28 p 91
Wage Plans: Smorgasbord, Anyone? Jan 15 p 56

Clauser, H. R.
Plastics Have Alloys, Too, May 7 p 75

F

Feilke, M. F.
How to Make Money Out of Muck, May 7 p 63
Well, 2nd Half Business Will Be . . ., June 18 p 48

G

Greene, A. M.
Are Two Metals Better Than One? Apr 30 p 68
One Wire Does the Work of Many, Feb 19 p 104
Pulpits Pack Factory-Tested Punch, Mar 5 p 63
Steel in a World of Computers, Feb 26 p 67
What's Happening to Fuel Cells? Mar 19 p 57

Grosch, Herbert R. J.
The Corporate Dropout, Jan 1 p 81

H

Hockenberry, S. H.
Tank Car Safety Blows Sky High, Feb 12 p 50
Unscrupulous Job Counselors Lure Many Executives, Jan 15 p 61

I

Irving, R. R.
Aerospace Faces a Tough Decade, June 11 p 99
Are Two Metals Better Than One? Apr 30 p 68
Ingalls West: Yard of the Future, Feb 12 p 63

K

Kalb, W. J.
. . . As Foreign Producers Eye U. S., May 28 p 89

Kaufman, K. A.
AFL-CIO Pushes for Import Quota Recipe, May 28 p 19
Accountants Move to Slow Down 'Instant Earnings', Mar 12 p 91
Administration Plays Politics with Safety Bill, Apr 23 p 21
Another Bill Won't Solve Water Pollution Problem, June 18 p 21
Antitrust Chief Hails Success in Reciprocity Crackdown, Feb 12 p 19
Approved Safety Bill Heads for Stormy House Fight, June 25 p 21
Boom! Here Comes the Noise Rules Explosion, Apr 16 p 19
Budget Skirts Between Inflation and Recession, Feb 5 p 50
CEA Prodded to Form Price-Wage Limits, Apr 2 p 21
Cabinet Members Eye Contractors' Winters of Discontent, Jan 22 p 19
Clear Signs of a Pro-Business Drift, Mar 12 p 85
Consumer Backers Press for Warranty Bill Passage, Feb 5 p 21
Copper: What About Free Choice? Mar 19 p 48
Court Ruling Clears Way for Strike Curbs, June 11 p 19
Court Says Steel's Odd Couple Discriminates, May 7 p 62
Defense Accounting Bill Faces Senate Block, June 4 p 19
Defense Accounting Rules Get Green Light, May 21 p 21
Defense Spending Rides the Down Elevator, Mar 5 p 19
Did the Good Dr. H. Lay an Egg? May 14 p 50
Don't Put U. S. in the Scrap Business, Senate Group Urged, Mar 12 p 19
Excise Taxes Fingered as Fiscal Crutch, Jan 15 p 19
Fed Relaxes Grip on Fiscal Squeeze, Mar 26 p 59
Federal Corporation Urges Foreign Investing, Jan 22 p 46
Federal Tools Get 5-Year Phase-Out, May 14 p 53
Growth Slowdown Seen for Primary Metals, Jan 8 p 19
How About a Product-That-Pollutes Tax? Mar 26 p 21
HUD Takes First Steps in Smashing Modular Home Bugs, Mar 5 p 48
Industry is Left to Rock the Cradle, Jan 29 p 43
Interior Promises Help for Junked Car Processing, Apr 9 p 19
It May be Tougher Keeping Takeover Deals Quiet, Feb 19 p 19
Jawbone Wage-Price Control is Dead, CEA Feels, Feb 26 p 21
Keep That Surcharge Rolling in This Year, CED Urges, Jan 1 p 21
Meet Latest Pollutant—Politics, Feb 19 p 79
Mergers: Congress Urged to Postpone Crackdown, Feb 26 p 58
Mining's Public Land Prospects Soar, June 25 p 49
Nixon Cools Heels on Request for Nontariff Trade Powwow, Mar 19 p 17
Nixon: Don't Lose Faith in the Economy, May 7 p 19
Nixon Panel to Probe Copper Prices . . ., Jan 15 p 54
Price Controls: Is Jawboning a Workable Policy? Jan 29 p 19
"Priorities" Budget Can't Do it All, Feb 19 p 87
Revenue Reform Act Loaded Against Capital Growth? Apr 30 p 21
Scrap Export Controls? Not Likely, Feb 26 p 53

Scrap Industry Bucks Laclede Drive to Curb Scrap Exports, June 25 p 43
Senate Commerce Panel Okays Guaranty Measure, May 14 p 19
Senator, This Way to the Rolling Mill, Jan 22 p 41
Senators Set to Tour a 'Deadly, Horrible' Plant, Apr 9 p 57
Somebody Has to Pay . . . But Who? Apr 9 p 58
Steel Backs Off From Quota Demands, Apr 23 p 88
Steel Boom Weakens Quota Cries, June 11 p 86
Steel Prices: Return to Brinkmanship, Jan 29 p 38
Sticks and Stones, No Broken Bones, May 28 p 84
Suit Links Westinghouse, Japanese, Apr 30 p 61
Tax Break for Domestic Exporters? May 21 p 67
Tax Reform Adds Industry Burdens, Jan 8 p 49
Washington 1970: Year of Transition, Jan 1 p 74

Mc

McManus, G. J.
AISI: Profits, Prices and Fat Pacts, June 4 p 57
Ailing J&L Gets Well in Court, June 18 p 54
Aluminum Swings to Strip Casting, Mar 26 p 73
Armco Tries to Shake Australian Iron Tree, June 25 p 44
Booming World Steel Bends Quota Systems—a Little, Feb 19 p 83
. . . But Mills Mull More than Money, Mar 12 p 89
Can Quality Control be Defect Free? June 18 p 59
Coal: Dusting Off a Sooty Image, Jan 8 p 47
Conglomerates in Steel: Good Grief? Apr 23 p 84
Direct Reduction Draws a Crowd, Feb 19 p 84
Do We Need a New Steel Technology? Jan 15 p 65
For Gulf (and Others), It's That Kind of Year, May 7 p 65
Forget the Cycle—Full Speed Ahead, June 11 p 93
Georgetown Grows Older . . . and Bolder, Apr 16 p 54
Hurry, You've Only Get a Year, Feb 12 p 47
If Everything Else Goes Up, Can Sheet be Far Behind? Apr 9 p 59
It Was a Very Bad Year for Steel Profits, Feb 5 p 48
Metalworking Seeks a New Home, Feb 5 p 43
Mini-Mills Choke on Scrap Prices, Jan 22 p 44
Mini-Mills Leery of Midi-Mill Size, May 21 p 71
'Nasty Surprises' Stalk Steel's Year, June 11 p 80
New Technology Triggers Stainless Steel Price Cuts, Apr 23 p 86
Power Equipment: More Import Lumps, Mar 19 p 43
Scrap: Prices Up, Supplies Down, Jan 8 p 52
Silence May be Golden, But . . ., Mar 5 p 41
Somebody Has to Pay . . . But Who? Apr 9 p 58
Soothing the Price-Volume Jitters, June 4 p 66
Space is for Exploring, Mar 19 p 47
Steel Prices: Return to Brinkmanship, by K. A. Kaufman and G. J. McManus, Jan 29 p 38
Steel's Profits Fall So Prices Rise, May 7 p 60
Steelmen Argue Over Global View, May 21 p 68
Steelmen Dust Off New Plant Plans, Apr 9 p 61
Strikes, Market Muddle Steel Prices Into Trouble, May 28 p 86
USWA Charges U. S. Steel in Incentive Backdown, Feb 26 p 57
Wage Hike Pinch Felt by Japanese Steel, Jan 29 p 44
Well, 2nd Half Business Will Be . . ., June 18 p 48
Who's Going to Harness Builders? Mar 26 p 64
Will Positive Thinking Really Work? June 18 p 57
World's Product Hunger Unslaked, Apr 2 p 55

M

Malim, T. H.
Adaptive Control Lowers Cutting Cost, June 25 p 63
Alloys Get a New Buildup, Mar 26 p 79
Gas Seeks Out Powder Metal Flaws, June 25 p 59
Low Costs Develop for NC Lathes, May 21 p 86
Maxi-Uses for Mini-Computers, Mar 12 p 101
More Power to New Breed of Lasers, Apr 23 p 99
New Turbine Flexes its Muscles, Feb 19 p 101
Visual Aid Permits Accurate Assembly Training, Mar 19 p 65
Well, 2nd Half Business Will Be . . ., June 18 p 48

Masubuchi, Koichi
One-Side Welding: It's Big in Japan, Feb 26 p 72

Miller, J.
Will DOT Find its Heart in Frisco? Mar 12 p 92

N

Neal, H. R.
Finland Puts Emphasis on Metals, Apr 30 p 58
Scrap Industry Gears Up for the 70's, Jan 29 p 46
Steelmen Argue Over Global View, May 21 p 68

O

Obrzut, J. J.
Centrifugals Fill Gap in Air Power, Apr 9 p 78

P

Patton, W. G.
How Aluminum Engines are Made, May 28 p 104
Jobs Pile Up for Ductile Iron, May 21 p 80
Systems that Keep Automakers on Top, Jan 22 p 55

R

Rivkin, S. M.
Dangle a Different Kind of Carrot, Jan 22 p 52
Job Market Tight as Recruiting Slips, Mar 19 p 51
'60s Sizzle Fizzles, '70s Simmer, May 28 p 83
Who Will Rule the Ocean Floor? Apr 16 p 57

S

Sandford, J. E.
Cutting Seeks the Better Way, Apr 2 p 71
Machine Tools in New Era of Change, Jan 8 p 63
Mini-Computers Make Big NC Waves, Feb 19 p 102
Why Computers Fail . . . Or Succeed, Apr 30 p 63

Schwartz, N. B.
Aerospace Faces a Tough Decade, June 11 p 99
Forging PM Preforms: Say When, June 25 p 55
PH Stainless Challenges Titanium, Feb 5 p 59
Sights Set on PM Preforms, Apr 16 p 63
Welders Train to Fit Industry's Needs, Apr 9 p 71
"Zero Defects" at Indy, June 18 p 65

Shapiro, R. D.
Beware Durables Orders Benchmark, Jan 29 p 48
Money Supply: What With It? Mar 12 p 96

Stephenson, Stan
"Zero Defects" at Indy, June 18 p 65

Suchocki, C. J.
Can Phoenix Rise from the Ashes? Jan 8 p 54
Consumerism Eyes Design, Materials, Jan 22 p 49
Does Noise Control Need the Pill? Apr 2 p 58
GE: Accord: Has the Pattern Been Set? Feb 5 p 49
Labor '70: Color it Green and Angry, Jan 1 p 72
Mystery Shrouds Steel Share Grab, June 25 p 41

W

Wakefield, B. D.
Adhesive Bonding Bonanza Beckons, May 7 p 84
Aluminum PM Parts: A Good Start, Mar 19 p 60
Field Fabrication's the Answer for Giant Nuclear Vessels, Apr 30 p 76
General Aircraft: Up, Up and Oy Vey! Apr 2 p 63
Ingall's West: Yard of the Future, Feb 12 p 63
Machining Center Sets Speed Records, Apr 2 p 80
New Lathe Closes Ranks in Automated Tool Line, Feb 19 p 106
Press Builders Take Systems Path, Mar 5 p 57
Robots March Into Metalworking, May 7 p 79
Squeeze Casting Has U. S. Friends, May 28 p 97
Stampers Eye Copper Substitutes, Apr 30 p 74
U. S. Heads for the Mineral Poorhouse, June 4 p 71

Williams, D. N.
AMC's Gremlin Leads Detroit Small Car Parade, Jan 22 p 43
Adaptive Systems: "Look Ma, No Hands", Jan 1 p 23
Air-Bag a 'Must' on '72 Cars, Mar 26 p 23
"Air Bag's Got Bugs", say Automen, May 21 p 23
Automakers Chase Spring Rainbow, Mar 5 p 21
Automen Hopeful Despite 500,000 Production Slump, by D. N. Williams, Apr 9 p 21
Automen Race to Get Gas Turbines Going, Apr 2 p 23
Canada's Jawbone Needs Rewiring, June 25 p 46
Catalysts: Auto Pollution Solution? May 28 p 21
Critics Strong-Arm Muscle Cars, Feb 12 p 21
Cyclops Eyes Detroit Steel, Apr 2 p 57
'D. C. to Boston—I'm Exhausted!', June 18 p 23
Disc Brakes Grab for the Big Rigs, Jan 8 p 21
. . . Diversification is One Way to Go, Jan 15 p 59
Do the Guy a Favor: Fire Him, Feb 5 p 55
Effetes View Science: 'A Sorry State', Jan 8 p 51
Electrics Flirt with Fleets—Again, Jan 15 p 21
Ford is Horsing Around with Pinto, Claims UAW, June 18 p 56
Ford's Iron Oxen, Feb 26 p 23
Ford Slams Anti-Inflation Measures, May 21 p 63
Ford's Mobile Lab Tests Emissions, Feb 5 p 23
GM Dubs New Roof 'Double Shell Top', May 14 p 21
GM Hedges on Strikes; Postpones Introductions, May 7 p 21
GM Measures Scrap for Steel Coffin, Mar 5 p 43
GM Stages Pollution Show-&-Tell Show, Apr 23 p 23
GM Suppliers SPEARed for Quality, Jan 22 p 21
GM's Aluminum Engine Takes a Bow, Apr 30 p 23
GM's Engines Emit Tool Sales? Feb 26 p 51
GM's 60-Second Service Dash, Jan 29 p 21
How High Will UAW Wage Increases Climb in '70? Apr 30 p 56
Hydrostatics Pressure into Machine Tools, Conveyors, Jan 8 p 53
Is GM Trying to Wangle the Wankel? June 11 p 21
'It's Time for General Motors', June 4 p 61
NC Patterns for Castings: 'Nothing Earthshaking'? Mar 26 p 63
New Cold-Draw Lube Gets Mixed Reviews, May 14 p 52
On the Way to Detroit's SME Show . . ., Apr 16 p 53
Only Gloom is Moving Well in Detroit, May 7 p 64
Pollution Teach-In Raises a Stink, Mar 19 p 44
Price War Ahead for Pollution Kits? Mar 19 p 19
Rebirth of Bumpers—That Bump! Apr 16 p 21
Reynolds Wrap Up Aluminum Engine, June 25 p 23
Sales of Auto Extras Slow Down, Apr 9 p 21
Shifting Auto Trade Grinds Gears, June 4 p 55
Standardization Claims First Victim, Mar 12 p 21
Tool & Die: Things are Good, But—, Feb 12 p 48
UAW Message to Detroit: Pay Up or Shut Down, Jan 15 p 57
U. S. Mini Cars vs the Imports, Apr 9 p 55
U. S. Small Car Race Heats Up, June 4 p 21
Urethane: Up Front . . . and Counting, Feb 19 p 21
Watch the Robot Plug Himself In, Apr 16 p 47
Well, 2nd Half Business Will Be . . ., June 18 p 48
Why is Everybody Leaving? Feb 12 p 56
Yankee Machine Tool Maker Sets Up First Far East Shop, Jan 29 p 45

Wilson, R. A.
Buyers Drag Feet on Paying Up, Apr 23 p 87
Copper Prices LME Down, U. S. Steady, Feb 12 p 52
Foreign Builders Move In on Materials Handling, May 21 p 66
Forging Image Needs Two-Sided Uplifting, Feb 19 p 86
Foundry Equipment: Why the Deluge? June 25 p 45
Foundrymen Flounder for Price Gauge, Apr 2 p 61
GE-Honeywell Tie: Backlash for NC? May 28 p 87
GM's New Cupola Blows Continuous Melting Process, Apr 16 p 49
Machine Tool Controls: Whose Business Is It? Feb 12 p 45
Machine Tools: No Surprises in 1970, Jan 29 p 41
Machine Tools Take February Nosedive, Apr 2 p 60
New Unit Joins Race to Age NC Controls, June 4 p 60
Newest Quiz Craze: Hitting the Big Export Jackpot, June 18 p 55
One Good Turn on Vertical Lathe Worth Two on Another, Feb 26 p 76
Ore Shipping: A Time to Consider All Seasons? Jan 22 p 48
Pig Iron Rounds Out Price Hikes, Mar 12 p 87
Pollution: Where Objectivity Ends, Feb 26 p 59
Radicals Kidnap Pollution Baby, Jan 29 p 42
Retrofitting Seeks its Market Fit, Mar 26 p 60
Rubber Industry Prepares to Bounce into New Talks, Apr 2 p 59
The Shaking of a Precedent? May 21 p 61
Steel's Salvation in a Shrinking Market . . ., Jan 15 p 58
Toolmen Play both Sides of the Oceans, Mar 5 p 45
Toolmen Plumb Ventures in Japan, Mar 19 p 46
Well, 2nd Half Business Will Be . . ., June 18 p 48
Why the Chips Should Fly Faster, May 14 p 61

XUM

IRON AGE A CHILTON PUBLICATION Chestnut and 56th St., Philadelphia, Pa. 19139

Printed in U.S.A.

XUM

XUM